



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

Science and Ecosystem Support Division  
Enforcement and Investigations Branch  
980 College Station Road  
Athens, Georgia 30605-2720

November 12, 2013

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**MEMORANDUM**

**SUBJECT:** Lees Lane Landfill Soil Gas Study  
Louisville, Kentucky  
SESD Project # 13-0364

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**THRU:** Laura Ackerman, Chief  
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**TO:** Donna Seadler, Remedial Project Manager  
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Attached is the Lees Lane Landfill Soil Gas Study Report that was conducted in Louisville, Kentucky, June 4-6, 2013. If you have any questions concerning the report or sampling investigation, please call me at (706) 355-8741 or e-mail me at [Slagle.Tim@epa.gov](mailto:Slagle.Tim@epa.gov).

United States Environmental Protection Agency  
Region 4

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**Report**  
**Lees Lane Landfill Soil Gas Study**  
**Louisville, Jefferson County, Kentucky**  
**Date of Study: June 4-6, 2013**  
**SESD Project Identification Number: 13-0364**

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**Lees Lane Landfill  
Soil Gas Study  
Louisville, Jefferson County, Kentucky  
June 4-6, 2013**

## **INTRODUCTION**

On June 4-6, 2013, Tim Slagle and Brian Striggow from US EPA, Region 4, Science and Ecosystem Support Division (SESD), along with Steve Camp, Integrated Laboratory Systems (ILS), collected soil gas samples at the Lees Lane Landfill Site in Louisville, Kentucky. The investigation was requested by Donna Seadler, Remedial Project Manager, EPA Region 4, Superfund Branch.

## **SITE BACKGROUND**

Lees Lane Landfill (the site) is located at the west end of Lees Lane adjacent to the Ohio River in Louisville, Jefferson County, Kentucky (Figure 1). The geographic coordinates for the site are latitude 38.191110, North and longitude -085.883060 West.

The Lee's Lane Landfill is a 112-acre site that received over two million cubic yards of domestic, commercial, and industrial wastes between the 1940s and 1975. Sand and gravel quarrying also occurred on the site before and during the property's use as a landfill.

In 1975, residents living next to the site reported flash fires around their water heaters. After explosive levels of methane gas were detected, seven nearby homes were evacuated and purchased by local authorities. The landfill was closed by the State that same year. In 1980, State personnel discovered 400 exposed drums of hazardous materials, some highly flammable, along the Ohio River bank next to the landfill.

The majority of the 1,100 residents of a subdivision located adjacent to the landfill are connected to a public water supply system, which draws from an underlying aquifer.

## **Threats and Contaminants**

Groundwater, soil, and surface water were contaminated with benzene, inorganic chemicals, and heavy metals including lead and arsenic. The air was polluted with methane gas vented from the landfill. Exposed drums were found to contain more than 50 chemicals including phenolic resins, benzene, and a variety of heavy metals.

## **Site Cleanup Plan**

The Record of Decision (ROD) for the site was issued in 1986. Major cleanup elements for the site included:

- Construct a ground water monitoring program that will serve as an early warning system should site conditions change.
- Control the vertical and lateral subsurface migration of methane and other gases.

- Institute a routine monitoring program that will serve to detect any undesirable and possibly dangerous levels of methane and or toxic vapors migrating into the Riverside Gardens neighborhood.
- Institute an ambient air monitoring program.

### Cleanup Progress

In 1980, after methane was discovered in nearby homes, the Kentucky Department of Hazardous Material installed a gas venting system at the landfill.

In 1981, the site owners pumped liquid wastes from the exposed drums found near the Ohio River. They shipped hazardous wastes to an approved disposal facility, removed the drums and other wastes from the river bank, and buried them on the site.

In 1987 and 1988, EPA emergency staff performed cleanup activities at the landfill, including site security, migration control, and the remedy selected in the ROD. EPA finished cleaning up the site in 1988.

Site cleanup activities were led primarily by EPA. The Lee's Lane Landfill site was deleted from the National Priorities List in May 1996.

### Enforcement Activities

On July 16, 1991, the EPA issued an Administrative Order of Consent under which the Louisville and Jefferson County Metropolitan Sewer District agreed to perform operations and maintenance activities at the site for twenty-nine years with oversight from the Commonwealth of Kentucky.

### OBJECTIVE

Residents living in the neighborhood located east of the landfill have expressed concerns of soil gas emissions that may be migrating from the landfill. The overall goal of this effort is to collect data of sufficient quality and quantity to determine if soil gas concentrations of Volatile Organic Compounds (VOC) and methane may pose a potential health hazard to residents living near the landfill.

### SAMPLING DESIGN

SESD used an authoritative sampling design to collect soil gas samples to satisfy the data quality objectives of the study. SESD collected samples from 5 temporary soil gas monitoring wells located in the residential neighborhood located south of Lees Lane Landfill. These samples were collected using a track mounted, self propelled Geoprobe® that incorporates Direct Push Technology (DPT). (Appendix B; Photo 5).

In addition, SESD collected soil gas samples from 13 permanent soil gas monitoring wells that are located south of Lees Lane Landfill (Appendix B; Photos 7 thru 13).

The sampling stations were selected by Tim Slagle and Donna Seadler, US EPA Region 4. The stations where the sampling was conducted are listed in Table 2 and designated on the site map (Appendix A; Figure 1).

## INVESTIGATION METHODOLOGY

### Task Description

U.S. EPA, Science and Ecosystem Support Division (SESD) personnel collected 20 soil gas samples and quality assurance samples from permanent and temporary soil gas monitoring wells located near the landfill. The soil gas samples were analyzed for VOCs at the SESD laboratory using *EPA Compendium Method TO-15, Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters and Analyzed by Gas Chromatography Mass Spectrometry (GC MS)*, January 1999. Table 1 contains the SESD Target VOC Analytes, which are VOCs for which a standard was generated. In addition the samples were analyzed for methane by Gas Chromatography Flame Ionization Detection (GC FID) using SESD Standard Operating Procedure ID # ASB V100.

### TEMPORARY SOIL GAS WELL SAMPLING

SESD installed 5 temporary soil gas monitoring wells using a Geoprobe® equipped with Direct Push Technology (DPT) and Post Run Tubing (PRT) to collect the samples. These sample stations were located between the Ohio River levee and the residential neighborhood. These locations are designated by yellow push pins on Figure 1. The soil gas samples were collected in a sampling interval of 6 feet to 24 feet below grade surface (bgs) which is similar to the screened interval of the most recently installed permanent gas monitoring wells designated GMW1 thru GMW3.

Samples collected using the Geoprobe® DPT PRT system are collected quickly and with a high degree of assurance that the samples are representative of the targeted depth. Using this method, there will be no leakage at probe rod joints that can compromise the integrity of the sample.

The down-hole components of the DPT PRT system include:

- Teflon® sample delivery tubing (1 4 inch outside diameter)
- Probe rods
- PRT Adapter
- Expendable point holder
- Expendable point
- O-ring seals are used on the PRT Adapter and Expendable point holder to ensure a leak proof system that maintains sample integrity.

Prior to site arrival the proposed soil gas sampling locations were cleared using One Call utility locating service. Upon arrival at the site each individual soil gas sampling location is cleared using a pipe scanner and metal locator. Then the location is hand augured to a depth of 4 feet below grade surface (bgs), collecting the soil cuttings on a clean piece of plastic sheeting.

The expendable point is placed in the expendable point holder, which in turn is attached to the drive rod, and driven to depth. The drive rod and expendable point holder are retracted, separating the expendable point from the point holder, creating the desired void in the soil.

The top of the drive rod is "sealed" in the augured hole using 3 quarts of hydrated bentonite clay crumbles. A PRT adapter and Teflon® sample tubing was advanced down the inner rods and secured to the expendable point holder. The free end of the tubing at the surface was then attached to the TVA-

1000B equipped with a flame ionization detector (FID) photo-ionization detector (PID) to purge the line of intrusive ambient air and to draw a sample at a flow rate of less than 200 milliliters per minute (200 mL min). To allow for subsurface conditions to equilibrate, soil gas sampling did not occur for at least 20 minutes after probe installation. Once the line had been purged using the TVA-1000B, and subsurface conditions have equilibrated, the sampling tube was then connected to a flow device attached to the 6 liter SUMMA® stainless steel sampling canister. The flow control device allows the sample flow rate to fill a 6 liter canister generally in less than 1 hour. However, the flow rate can be reduced due to the soil type and moisture content. The flow control devices are equipped with a vacuum gauge to monitor the canister pressure during sampling. Collection of the soil gas samples in this fashion allows the soil to recharge and prevents intrusion of ambient air that would dilute the soil gas sample.

## **PERMANENT SOIL GAS WELL SAMPLING**

SESD collected samples from 13 permanent soil gas monitoring wells established near the perimeter of Lees Lane Landfill. These locations are designated by red squares on Figure 1. The polyvinyl chloride (PVC) slip-cap at the top of each well could not be removed for "sounding" to verify the depth of the wells as discussed in the Quality Assurance Project Plan (QAPP). The well depths were verified by Kentucky's on-site contractor following this sampling event. In addition, the sample collection was conducted thru the existing tubing between the wellhead and corresponding sampling valves.

Prior to sampling the wellhead was visually inspected for structural integrity and each existing wellhead fitting was checked for tightness. Then the cleanest sampling port was selected for sampling. The remaining port was capped, if so equipped (wells clusters G1 to G5). Then a short section of 1 4 inch Teflon® sampling tube was attached to the selected sampling port. The tubing was attached to the TVA-1000B equipped with a flame ionization detector (FID) photo-ionization detector (PID) to purge the sampling tube of intrusive ambient air with a low flow rate of less than 200 ml min. Once the sampling tube had been purged using the TVA-1000B, it was disconnected from the sampling tube. The sampling tube was then connected to a flow device attached to the 6 liter SUMMA® stainless steel sampling canister. After the sampling was finished, the sample tube is removed, the port capped and the well secured.

All samples were collected and handled in accordance with the EPA Region 4 *SESD Field Branches Quality System and Technical Procedures*. The following specific procedures were used during sample collection for all direct field measurements and sampling activities:

SESDPROC-307-R2, Soil Gas Sampling

SESDPROC-110-R3, Global Positioning System

SESDPROC-005-R2, Sample and Evidence Management

SESDPROC-010-R5, Log Books

SESDPROC-205-R2, Field Equipment Cleaning and Decontamination

SESDPROC-209-R2, Packing, Marking, Labeling and Shipping of Environmental and Waste Samples

SESDPROC-105-R2, Groundwater Level and Well Depth Measurement

## **SAMPLE IDENTIFICATION PROTOCOLS**

The sample Station IDs that were used for this investigation are listed in Table 2. The 5 SESD installed

temporary soil gas sampling wells have Station IDs that begin with LLL for Lees Lane Landfill.

There are 2 types of existing permanent soil gas sampling wells.

- The "G Cluster Wells" of which there are five clusters, each well cluster has 2 wells, one shallow (screened approximately 5 to 15 feet bgs.) and one deep (screened approximately 30 to 40 feet bgs.). In addition, each wellhead has 2 sample ports. The individual shallow and deep wellheads are designated at each cluster as either Right or Left. The "R" or "L" designation is determined by orienting the well cluster between yourself and the Ohio River, while facing the river. Thus, the individual wells in the cluster are followed by an R or L. These wells were installed in October 1987.
- The "GMW Wells" of which there are three, each well is screened approximately 5 to 20 feet bgs.). These wells are located outside the southeast corner of the landfill circling the G1 well cluster. These wells were designed in November 2010.

Samples begin with the Station-ID (Table 2) and are followed by matrix identifier:

- SG for Soil Gas

The matrix identifier is followed by the month-year of the sampling event. For example, sample station LLL4 sampled in June 2013 would have a Sample ID as follows:

LLL4SG0613

Soil Gas split samples are identified with an "S" following the sample station ID. For Example, a duplicate air sample collected at sample station GMW2 sampled in June 2013 would have a Sample ID as follows:

GMW2SSG0113

## RESULTS

Table 1 contains a list of the SESD VOC Target Analytes. The sampling stations are described in Table 2. The summary tables of the methane and VOC analytical results for the soil gas samples collected from the SESD installed temporary wells are contained in Table 3. Table 4 contains the summary tables of the methane and VOC analytical results for the samples collected from the permanent gas monitoring wells. A map of the study area; Figure 1, is provided in Appendix A. Appendix B contains photographs of each of the sampling stations. The time imprinted on each of the photographs is incorrect, the correct sampling times are reported in the Sample Date of Tables 3 and 4. Appendix C contains the SESD Methane Analytical Report. Appendix D contains the SESD Volatile Organic Compound Analytical Report. Appendix E contains the Field Sampling Logbook and Appendix F the Drilling Logbook.

The laboratory results for the VOC Target Analytes from the analysis of the soil gas samples collected during the study are summarized in Tables 3 and 4. The numerical values highlighted in yellow and listed in bold type-face are the analytical values that were detected above the Minimum Reporting Limit (MRL) for each of the target analytes. A Target VOC Analyte is identified based on a match with the instrument software's mass spectral library, and a calibration standard has been analyzed to confirm the compound's identification and the concentration reported.

In addition, numerical values for the non-detected target compounds have been included in the tables. The "non-detects" are printed in regular type-face, preceded by a "<" which denotes less than the numerical value is followed by a "U" which is a "Data Qualifier" that denotes that the analyte was not detected above the listed MRL. The listed value is the associated MRL and may vary between samples based on the dilutions required to quantitate the concentration of the VOC analytes accurately. It is important to note that some of the MRLs listed for the non-detects may be large and the associated VOC may be present at a concentration less than the reported MRL.

Many of the analytical results are followed by "Data Qualifiers" that are listed on page 4 of the SESD Analytical Reports and are summarized below:

- J The identification of the analyte is acceptable; the reported value is an estimate.
- O Other Data Qualifiers: refer to the list of Data Qualifiers at the front of the corresponding SESD Analytical Report contained in Appendix C
- U The analyte was not detected at or above the reporting limit.
- D-4 MRL elevated due to interferences.
- Q-2 Result greater than MDL but less than MRL.
- QC-1 Analyte concentration low in continuing calibration verification standard.
- QC-2 Analyte concentration high in continuing calibration verification standard.
- QC-3 Analyte calibration criteria not met.
- QC-4 Result greater than the highest point on the calibration curve.
- QC-5 Calibration check standard less than method control limits.
- QC-6 Calibration check standard greater than method control limits.
- QI-1 Internal standard was outside of method control limits.
- QS-5 Surrogate recovery is higher than established control limits.

The sampling of the SESD installed temporary soil gas wells LLL1 thru LLL5 commenced on Tuesday, June 4, 2013 at 13:20pm and finished Wednesday, June 5, 2013 at 11:12pm. Following the collection of these samples, the temporary wells were pressure grouted and closed out.

The sampling of the permanent soil gas wells commenced on Wednesday, June 5 at 11:55am and ended Thursday, June 6 at 13:45pm. There were several issues encountered during the sampling of these wells:

- The older "G" cluster wells have brass hardware that has corroded and is in generally poor condition. In addition, many of these fittings were loose and had to be tightened before sampling.

- Several of the sampling valves had debris and insect matter that had to be removed before sampling. EPA recommends that the fittings are replaced with stainless steel fittings and caps that have been solvent washed and baked to remove any machine oils.
- The existing tubing attached to the wells consisted of different polymer types. Tubing made from polymers other than Teflon® has been shown to scrub out or add to the concentration of VOCs in a sample. EPA recommends that all tubing attached to the wellheads and used for sampling is clear Teflon®. The clear tubing is inert for VOC sampling and is a visual indicator useful in determining the cleanliness of the sample path.
- Individual wells should have stainless steel name plates designating well names including right or left and the total and screened depth.
- The fence enclosure for the G5 well cluster needs to be repaired and have the vegetation covering the existing enclosure removed.
- The wellhead at G4L has a crack in the slip cap. The samplers were unable to determine if the crack had any effect on sampling.

All of the samples were analyzed for methane gas. Methane was detected at only sample station G1L which is located outside of the southeast corner of the landfill. The methane concentration at this location was 5.9 parts per million volume (ppmv), which is well below the lower explosion limit of 50,000 ppmv (or 5%) in air.

There were several detections of VOCs in the soil gas samples as listed in Table 3 and 4. Because many of the samples had high concentrations of a few VOCs, the minimum reporting levels (MRLs) for the remaining VOCs were elevated, thereby masking the possible trace concentrations.

There were 2 geographic areas within the study area that had the highest concentrations of VOCs in the soil gas.

The first area was at the north end of the study area and had high concentrations of Carbon Tetrachloride in the soil gas. This area includes the G4 permanent well cluster at the west end of Wilshire Avenue, and the LLL1 temporary well, which is located approximately 95 yards north, at the west end of Wilmoth Avenue.

The highest concentration of Carbon Tetrachloride in the soil gas was detected in the G4R permanent soil gas monitoring well which is the deep well in the G4 cluster and is screened from 30 to 40 feet bgs. The PVC wellhead slip cap for G4L permanent well had a crack that may have allowed ambient air into the gas sampling stream, thereby diluting the sample that was collected. The G4L well is the shallow well in the G4 cluster and is screened from 5 to 15 feet bgs. The VOCs detected in the soil gas from G4L were much lower in concentration than G4R as shown in Table 4. Photos depicting the collection of these soil gas samples at their respective locations are provided in Appendix A, Photos 1 and 12. The target VOC analytes discussed above, from sample locations G4R and LL1 are listed below. Additional VOC analytical results for these locations are found in Tables 3 and 4.

<b>Sample Station:</b>	<b>G4R</b>	<b>LL1</b>
<b>Soil Gas Sample ID:</b>	<b>G4RSG0613</b>	<b>LL1SG0613</b>
<b>Sampling Interval (feet bgs)</b>	<b>30 to 40</b>	<b>6 to 24</b>
1,1,1-Trichloroethane	170 ug m <sup>3</sup>	100 ug m <sup>3</sup>
1,2-Dichlorotetrafluoroethane (Freon 114)	110 ug m <sup>3</sup>	110 ug m <sup>3</sup>
<b>Carbon Tetrachloride</b>	<b>20000 ug/m<sup>3</sup></b>	<b>2700 ug m<sup>3</sup></b>
Chloroform	140 ug m <sup>3</sup>	160 ug m <sup>3</sup>
Tetrachloroethylene	160 ug m <sup>3</sup>	120 ug m <sup>3</sup>

The second area that had high VOC concentrations was centered on the "G1 cluster" of permanent soil gas wells located outside the southeast corner of the landfill. This group of wells had high concentrations of Tetrachloroethylene (Tetrachloroethylene) in the soil gas. This group of wells includes G1L, G1R, GMW1, GMW2 and GMW3.

The highest concentration of Carbon Tetrachloride in this group of 5 wells was detected in well GMW1 at 560 ug m<sup>3</sup>. The concentration of Carbon Tetrachloride in wells G1L, G1R, GMW2 and GMW3 ranged from 89 ug m<sup>3</sup> J.O to 220 ug m<sup>3</sup>.

The highest concentration of 1,2-Dichlorotetrafluoroethane (Freon 114) was detected in permanent well GMW3 at 440 ug m<sup>3</sup>. In addition, this VOC was also detected in temporary well LL5 at 300 ug m<sup>3</sup>, which is located approximately 110 yards southeast of well GMW3.

Photos depicting the collection of these soil gas samples at their respective locations are provided in Appendix A. VOC analytes discussed above, from sample locations G1L, G1R, GMW1, GMW2, GMW3 and LL5 are listed below. Additional VOC analytical results for these locations are found in Tables 3 and 4.

<b>Sample Station:</b>	<b>G1L</b>	<b>G1R</b>	
<b>Soil Gas Sample ID:</b>	<b>G1LSG0613</b>	<b>G1RSG0613</b>	
<b>Sampling Interval (feet bgs)</b>	<b>30 to 40</b>	<b>5 to 15</b>	
Tetrachloroethylene	250 ug m <sup>3</sup>	89 ug m <sup>3</sup> J.O	
1,2-Dichlorotetrafluoroethane (Freon 114)	120 ug m <sup>3</sup>	52 ug m <sup>3</sup> J.O	
<b>Sample Station:</b>	<b>GMW1</b>	<b>GMW2</b>	<b>GMW3</b>
<b>Soil Gas Sample ID:</b>	<b>GMW1SG0613</b>	<b>GMW2SG0613</b>	<b>GMW3 SG0613</b>
<b>Sampling Interval (feet bgs)</b>	<b>4.85 to 20.14</b>	<b>4.51 to 20.20</b>	<b>4.51 to 20.20</b>
Tetrachloroethylene	<b>560 ug/m<sup>3</sup></b>	210 ug m <sup>3</sup>	220 ug m <sup>3</sup>
1,2-Dichlorotetrafluoroethane (Freon 114)	68 ug m <sup>3</sup>	8.7 ug m <sup>3</sup> J.O	<b>440 ug/m<sup>3</sup></b>
<b>Sample Station:</b>	<b>LL5</b>		
<b>Soil Gas Sample ID:</b>	<b>LL5SG0613</b>		
<b>Sampling Interval (feet bgs)</b>	<b>6 to 24</b>		
Tetrachloroethylene	10 ug m <sup>3</sup> J.O		
1,2-Dichlorotetrafluoroethane (Freon 114)	300 ug m <sup>3</sup>		

## QUALITY ASSURANCE

Soil gas split samples were collected at 2 sampling stations to check the precision of the monitoring method. The soil gas split samples were collected at the same time and through a common 1 4 inch sampling tube. This was accomplished by installing a "tee" at the free end of the sample tube and splitting the flow of soil gas through 2 separate limiting orifices and into 2 separate evacuated Summa® canisters. Split sample results were similar, confirming the method precision was good.

- The soil gas split sample LLL3SSG0613 was collected during the same time interval as LLL3SG0613. Both samples were collected thru a single PRT implant at the temporary soil gas well sampling station LLL3 (Appendix B; Photo 3).
- The soil gas split sample GMW2SSG0613 was collected during the same time interval as GMW2SG0613. Both samples were collected thru a single PRT implant at the permanent soil gas well sampling station GMW2 (Appendix B; Photo 7).

A field blank canister designated LLLTB was evacuated and transported to the field, but not exposed, to check the possibility of contamination of the air samples during transport and storage. Analysis of the field blank canister showed that it remained clean, confirming there were no contaminants introduced during the sampling period or analysis.

## REFERENCES

United States Environmental Protection Agency. 2013. Quality Assurance Project Plan (QAPP) Lees Lane Landfill Soil Gas Study, Louisville, Kentucky. Date of study: June 4-6, 2013. SESD Project identification Number: 13-0364. Science and Ecosystem Support Division. Athens, Georgia

## TABLES

**TABLE 1**  
**SESD VOC Target Analytes**

(m- and/or p-)Xylene	Chloroform
1,1,1-Trichloroethane	Chloromethane
1,1,2,2-Tetrachloroethane	cis-1,2-Dichloroethene
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	cis-1,3-Dichloropropene
1,1,2-Trichloroethane	Cyclohexane
1,1-Dichloroethane	Dibromochloromethane
1,1-Dichloroethylene (1,1-Dichloroethylene)	Dichlorodifluoromethane
1,2,4-Trichlorobenzene	Ethyl Acetate
1,2,4-Trimethylbenzene	Ethyl Benzene
1,2-Dibromoethane (EDB)	Heptane
1,2-Dichlorobenzene	Hexachlorobutadiene
1,2-Dichloroethane	Hexane
1,2-Dichloropropane	Isooctane
1,2-Dichlorotetrafluoroethane (Freon 114)	Isopropanol
1,3,5-Trimethylbenzene	Methyl Butyl Ketone
1,3-Butadiene	Methyl Ethyl Ketone
1,3-Dichlorobenzene	Methyl Isobutyl Ketone
1,4-Dichlorobenzene	Methyl T-Butyl Ether (MTBE)
1,4-Dioxane	Methylene Chloride
3-Chloropropene	o-Xylene
4-Ethyltoluene	Styrene
Acetone	Tetrachloroethene (Tetrachloroethylene)
Acrylonitrile	Tetrahydrofuran
Benzene	Toluene
Benzyl chloride	trans-1,2-Dichloroethene
Bromodichloromethane	trans-1,3-Dichloropropene
Bromoform	Trichloroethene (Trichloroethylene)
Bromomethane	Trichlorofluoromethane (Freon 11)
Carbon disulfide	Vinyl acetate
Carbon Tetrachloride	Vinyl bromide
Chlorobenzene	Vinyl chloride
Chloroethane	

**TABLE 2**  
**Soil Gas Sampling Stations**  
**Lees Lane Landfill**  
**June 2013**

<b>SESD Temporary Soil Gas Sample Locations</b>					
<b>SAMPLE STATION</b>	<b>SAMPLE ID</b>	<b>LOCATION DESCRIPTION</b>	<b>SAMPLING INTERVAL</b>	<b>LATITUDE</b>	<b>LONGITUDE</b>
LLL1	LLL1SG0613	SESD Temp well; west end of Wilmoth Ave.	6 - 24 feet bgs.	N 38.19598	W 085.87745
LLL2	LLL2SG0613	SESD Temp well; Howard Ave 265 feet south of Lees Lane	6 - 24 feet bgs.	N 38.19349	W 085.87773
LLL3	LLL3SG0613	SESD Temp well; backyard of 614 Putman Ave at treeline	6 - 24 feet bgs.	N 38.19175	W 085.87891
LLL3	LLL3SSG0613	LLL3 Split Sample	6 - 24 feet bgs.	N 38.19175	W 085.87891
LLL4	LLL4SG0613	SESD Temp well; south end of Putman Ave	6 - 24 feet bgs.	N 38.18966	W 085.87941
LLL5	LLL5SG0613	SESD Temp well; 300 feet north of intersection of active levee and old levee	6 - 24 feet bgs.	N 38.18873	W 085.87991

<b>Permanent Soil Gas Monitoring Well Locations</b>					
<b>SAMPLE STATION</b>	<b>SAMPLE ID</b>	<b>LOCATION DESCRIPTION</b>	<b>SCREENED INTERVAL</b>	<b>LATITUDE</b>	<b>LONGITUDE</b>
GMW1	GMW1SG0613	east of levee, south end of landfill	4.85 - 20.14 feet bgs.	N 38.19072	W 085.88049
GMW2	GMW2SG0613	east of levee, at intersection of Howard Ave and Putman Ave	4.51 - 20.20 feet bgs.	N 38.190195	W 085.880242
GMW2	GMW2SSG0613	GMW2 Split Sample	4.51 - 20.20 feet bgs.	N 38.190195	W 085.880242
GMW3	GMW3SG0613	east side of levee, southern most soil gas well	4.96 - 20.15 feet bgs.	N 38.18953	W 085.88048
G1R	G1RSG0613	G1 well cluster - shallow well east of levee, south end of landfill	5 - 15 feet bgs.	N 38.19000	W 085.88048
G1L	G1LSG0613	G1 well cluster - deep well east of levee, south end of landfill	30 - 40 feet bgs.	N 38.18997	W 085.88048
G2R	G2RSG0613	G2 well cluster - shallow well east of levee, mid-point of landfill	5 - 15 feet bgs.	N 38.19208	W 085.87958
G2L	G2LSG0613	G2 well cluster - deep well east of levee, mid-point of landfill	30 - 40 feet bgs.	N 38.19205	W 085.87968
G3R	G3RSG0613	G3 well cluster - shallow well east of levee, north end of landfill at Lees Lane	5 - 15 feet bgs.	N 38.19426	W 085.87830
G3L	G3LSG0613	G3 well cluster - deep well east of levee, north end of landfill at Lees Lane	30 - 40 feet bgs.	N 38.19423	W 085.87827
G4R	G4RSG0613	G4 well cluster - deep well east of levee, north of landfill at Willshire Ave	30 - 40 feet bgs.	N 38.19530	W 085.87778
G4L	G4LSG0613	G4 well cluster - shallow well east of levee, north of landfill at Willshire Ave	5 - 15 feet bgs.	N 38.19526	W 085.87778
G5R	G5RSG0613	G5 well cluster - deep well, 4402 Wilshire Ave, backyard	30 - 40 feet bgs.	N 38.19382	W 085.87566
G5L	G5LSG0613	G5 well cluster - shallow well, 4402 Wilshire Ave, backyard	5 - 15 feet bgs.	N 38.19382	W 085.87566

TABLE 3

## Lees Lane Landfill Temporary Soil Gas Monitoring Wells VOC Target Analyte Results

Station ID		LLL1	LLL2	LLL3	LLL4	LLL5	
Sample ID		LLL1SG0613	LLL2SG0613	LLL3SG0613	LLL3SSG0613	LLL4SG0613	LLL5SG0613
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas Split	Soil Gas	Soil Gas
Sample Date		6/4/2013 13:20	6/4/2013 14:44	6/4/2013 16:04	6/4/2013 16:04	6/4/2013 16:44	6/5/2013 10:23
Analyte	Units						
Methane	ppmv	< 4.2 U	< 4.2 U	< 4.1 U	< 4.2 U	< 4.1 U	< 4.1 U
(m-and/or p-)Xylene	ug/m3	14 J,O	5	4.1 J,O	3.4 J,O	4.9	3.5 J,O
1,1,1-Trichloroethane	ug/m3	100	30	3.8	2.9	6.3	< 12 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/m3	< 84 U	< 3.4 U	0.89 J,O	0.61 J,O	< 3.3 U	< 17 U
1,2,4-Trichlorobenzene	ug/m3	< 73 U,J,O	< 2.9 U,J,O	< 2.9 U,J,O	< 2.9 U,J,O	< 2.9 U,J,O	< 14 U,J,O
1,2,4-Trimethylbenzene	ug/m3	3.7 J,O	1.3 J,O	2.2 J,O	1.9 J,O	1.7 J,O	1.8 J,O
1,2-Dichlorotetrafluoroethane (Freon 114)	ug/m3	190	6.6	0.31 J,O	9.1	8.6	300
1,3,5-Trimethylbenzene	ug/m3	< 53 U	0.44 J,O	0.60 J,O	0.53 J,O	0.68 J,O	< 10 U,J,O
1,3-Butadiene	ug/m3	< 50 U	17	12	7.6	20	28
1,3-Dichlorobenzene	ug/m3	< 67 U	< 2.7 U	< 2.7 U,J,O	< 2.7 U	< 2.7 U	< 13 U,J,O
1,4-Dichlorobenzene	ug/m3	< 67 U	< 2.7 U	< 2.7 U,J,O	< 2.7 U	< 2.7 U	< 13 U,J,O
4-Ethyltoluene	ug/m3	< 110 U	0.46 J,O	1.6 J,O	1.2 J,O	1.8 J,O	< 22 U,J,O
Acetone	ug/m3	120	86	200 J,O	280	140	200 J,O
Benzene	ug/m3	11 J,O	9.2	7.6	5.7	12	12
Carbon Tetrachloride	ug/m3	2700 J,O	0.25 J,O	0.81 J,O	< 2.8 U	< 2.7 U	< 14 U
Carbon disulfide	ug/m3	1.6 J,O	7.8	3.5	2.9	7.2	5.5 J,O
Chloroethane	ug/m3	< 29 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 5.8 U
Chloroform	ug/m3	160	< 2.2 U	< 2.1 U	< 2.1 U	3.1	2.7 J,O
Chloromethane	ug/m3	< 22 U	< 0.91 U	0.77 J,O	< 0.90 U	< 0.89 U	< 4.4 U
Cyclohexane	ug/m3	13 J,O	< 1.6 U	7.3	5.9	7.4	4.8 J,O
Dichlorodifluoromethane (Freon 12)	ug/m3	48 J,O	7	8.9	6.4	5.1	4.0 J,O
Ethyl Benzene	ug/m3	6.8 J,O	3	2.4 J,O	1.9 J,O	3	2.3 J,O
Heptane	ug/m3	28 J,O	16	18	17	20	14
Hexane	ug/m3	35 J,O	25	27	18	8.5	18
Isooctane	ug/m3	< 54 U	< 2.2 U	0.77 J,O	< 2.2 U	< 2.1 U	< 11 U
Isopropanol	ug/m3	< 28 U,J,O	4.1 J,O	3.2 J,O	2.8 J,O	2.0 J,O	< 5.6 U,J,O
Methyl Butyl Ketone	ug/m3	< 47 U	< 3.3 U,O	2.5	2.6	< 1.9 U	6.5 J,O
Methyl Ethyl Ketone	ug/m3	24 J,O	20	67	46 J,O	32	68
Methyl Isobutyl Ketone	ug/m3	< 47 U	0.57 J,O	1.6 J,O	2.1	0.74 J,O	1.5 J,O
Methylene Chloride	ug/m3	< 38 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 7.5 U
Styrene	ug/m3	< 47 U	1.7 J,O	1.4 J,O	1.2 J,O	1.8 J,O	1.9 J,O
Tetrachloroethene (Tetrachloroethylene)	ug/m3	120	7.1	9.9	8.8	2.8 J,O	10 J,O
Toluene	ug/m3	19 J,O	14	11	9.2	15	12
Trichloroethene (Trichloroethylene)	ug/m3	< 61 U	< 2.5 U	< 2.4 U	< 2.4 U	< 2.4 U	< 12 U
Trichlorofluoromethane (Freon 11)	ug/m3	< 62 U	2.6	1.2 J,O	1.7 J,O	3	1.5 J,O
Vinyl chloride	ug/m3	< 29 U	< 1.2 U	< 1.1 U	< 1.2 U	< 1.1 U	< 5.7 U
cis-1,2-Dichloroethene	ug/m3	< 44 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 8.8 U
o-Xylene	ug/m3	4.2 J,O	2.2	1.7 J,O	1.3 J,O	2.4	1.6 J,O

TABLE 4

## Lees Lane Landfill Permanent Soil Gas Monitoring Wells VOC Target Analyte Results

Station ID	G1L	G1R	G2L	G2R	G3L	G3R	G4L	G4R	G5L	G5R	GMW1	GMW2	GMW2	GMW3	
Sample ID	G1LSG0613	G1RSG0613	G2LSG0613	G2RSG0613	G3LSG0613	G3RSG0613	G4LSG0613	G4RSG0613	G5LSG0613	G5RSG0613	GMW1SG0613	GMW2SG0613	GMW2SSG0613	GMW3SG0613	
Matrix	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas Split	Soil Gas	
Sample Date	6/5/2013 15:30	6/5/2013 15:18	6/5/2013 17:46	6/5/2013 17:30	6/6/2013 9:10	6/6/2013 9:06	6/6/2013 11:17	6/6/2013 12:15	6/6/2013 13:02	6/6/2013 12:56	6/5/2013 11:55	6/5/2013 12:34	6/5/2013 12:34	6/5/2013 14:50	
Analyte	Units														
Methane	ppmv	5.9	< 4.4 U	< 4.5 U	< 4.5 U	< 4.2 U	< 4.4 U	< 4.3 U	< 4.3 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.3 U	
(m-and/or p-)Xylene	ug/m3	< 42 U	< 4.2 U	< 4.2 U	< 4.2 U	0.34 J,O	< 4.1 U	< 4.0 U	< 120 U	< 4.0 U	< 3.9 U	< 40 U	< 40 U	< 40 U	
1,1,1-Trichloroethane	ug/m3	< 26 U	< 2.6 U	1.6 J,O	6.4	0.97 J,O	7.6	0.28 J,O	170	0.84 J,O	1.4 J,O	1.7 J,O	< 25 U	< 25 U	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/m3	< 36 U	0.51 J,O	0.58 J,O	0.76 J,O	0.91 J,O	0.62 J,O	0.60 J,O	< 100 U	0.56 J,O	0.80 J,O	< 34 U	< 34 U	< 34 U	
1,2,4-Trichlorobenzene	ug/m3	< 31 U,J,O	< 3.1 U,J,O	< 3.1 U,J,O	< 2.9 U,J,O	< 3.1 U,J,O	1.3 J,O	< 89 U,J,O	< 3.0 U,J,O	0.40 J,O	< 29 U,J,O	< 29 U,J,O	< 29 U,J,O	< 30 U,J,O	
1,2,4-Trimethylbenzene	ug/m3	< 23 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	0.34 J,O	< 66 U	< 2.2 U	< 2.2 U	< 22 U	< 22 U	< 22 U	
1,2-Dichlorotetrafluoroethane (Freon 114)	ug/m3	120	52 J,O	21	56	0.74 J,O	3.9	0.54 J,O	110	0.51 J,O	0.48 J,O	68	8.7 J,O	8.7 J,O	
1,3,5-Trimethylbenzene	ug/m3	< 23 U	< 2.2 U	< 2.3 U	< 2.3 U	< 2.1 U	< 2.2 U	< 2.2 U	< 64 U	< 2.2 U	< 2.1 U	< 21 U	< 21 U	< 22 U	
1,3-Butadiene	ug/m3	< 22 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.1 U	< 61 U	< 2.1 U	< 2.0 U	< 20 U	< 20 U	< 21 U	
1,3-Dichlorobenzene	ug/m3	< 29 U	< 2.9 U	< 2.9 U	< 2.9 U	< 2.7 U	< 2.8 U	0.15 J,O	< 82 U	< 2.8 U	0.25 J,O	< 27 U	< 27 U	< 28 U	
1,4-Dichlorobenzene	ug/m3	< 29 U	< 2.9 U	< 2.9 U	< 2.9 U	< 2.7 U	< 2.8 U	0.24 J,O	< 82 U	< 2.8 U	0.44 J,O	< 27 U	< 27 U	< 28 U	
4-Ethyltoluene	ug/m3	< 48 U	< 4.7 U	< 4.8 U	< 4.7 U	< 4.5 U	< 4.7 U	< 4.6 U	< 140 U	< 4.6 U	< 4.5 U	< 45 U	< 45 U	< 46 U	
Acetone	ug/m3	< 19 U	8.9 J,O	9.4	18	18	4.7	35 J,O	< 33 U	< 4.7 U	3.1	< 11 U,O	18	13	
Benzene	ug/m3	< 15 U	< 1.5 U	< 1.5 U	< 1.5 U	0.40 J,O	< 1.5 U	0.28 J,O	< 43 U	< 1.5 U	0.27 J,O	< 14 U	< 14 U	< 15 U	
Carbon Tetrachloride	ug/m3	< 30 U	< 2.9 U	0.25 J,O	< 2.9 U	0.48 J,O	0.22 J,O	8.8	20000	< 2.8 U	0.36 J,O	< 28 U	< 28 U	< 28 U	
Carbon disulfide	ug/m3	79	1.1 J,O	2.4	< 1.5 U	16	0.11 J,O	0.75 J,O	< 43 U	0.43 J,O	5.6	20	4.2 J,O	2.7 J,O	
Chloroethane	ug/m3	< 13 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 36 U	< 1.2 U	0.92 J,O	< 12 U	< 12 U	< 12 U	
Chloroform	ug/m3	92	0.87 J,O	6.9	< 2.3 U	0.34 J,O	< 2.2 U	0.54 J,O	140	0.77 J,O	< 2.1 U	9.5 J,O	1.3 J,O	1.5 J,O	
Chloromethane	ug/m3	< 9.7 U	< 0.96 U	< 0.96 U	< 0.96 U	2.8	< 0.94 U	1.8	< 27 U	< 0.92 U	0.57 J,O	< 9.1 U	< 9.1 U	< 9.2 U	
Cyclohexane	ug/m3	1.8 J,O	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.7 U	< 1.6 U	< 49 U	< 1.6 U	< 1.6 U	< 16 U	< 16 U	< 16 U	
Dichlorodifluoromethane (Freon 12)	ug/m3	4.5 J,O	4.0 J,O	16	42	3.2	6.5	2.9	45 J,O	3.1	3.2	11 J,O	3.6 J,O	3.0 J,O	
Ethyl Benzene	ug/m3	< 21 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 59 U	< 2.0 U	< 2.0 U	< 20 U	< 20 U	< 20 U	
Heptane	ug/m3	< 20 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.9 U	< 2.0 U	< 1.9 U	< 57 U	< 1.9 U	< 1.9 U	< 19 U	< 19 U	< 19 U	
Hexane	ug/m3	< 17 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.7 U	< 1.6 U	< 49 U	< 1.6 U	< 1.6 U	< 16 U	< 16 U	< 16 U	
Isooctane	ug/m3	< 23 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.2 U	< 66 U	< 2.2 U	0.17 J,O	< 22 U	< 22 U	< 22 U	
Isopropanol	ug/m3	170 J,O	< 1.2 U,J,O	< 1.2 U,J,O	< 1.2 U,J,O	< 1.1 U,J,O	< 1.2 U,J,O	0.64 J,O	< 34 U,J,O	< 1.2 U,J,O	< 1.1 U,J,O	16 J,O	< 11 U,J,O	< 11 U,J,O	< 12 U,J,O
Methyl Butyl Ketone	ug/m3	< 20 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.9 U	< 2.0 U	< 1.9 U	< 57 U	< 1.9 U	< 1.9 U	< 19 U	< 19 U	< 19 U	
Methyl Ethyl Ketone	ug/m3	< 15 U	2.8 J,O	1.5	3.2	2.5	0.48 J,O	4.4	< 41 U	0.71 J,O	0.97 J,O	< 14 U	< 14 U	< 14 U	
Methyl Isobutyl Ketone	ug/m3	< 20 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.9 U	< 2.0 U	< 1.9 U	< 57 U	< 1.9 U	< 1.9 U	< 19 U	< 19 U	< 19 U	
Methylene Chloride	ug/m3	< 16 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.5 U	< 1.6 U	0.41 J,O	< 47 U	< 1.6 U	< 1.5 U	< 15 U	< 15 U	< 16 U	
Styrene	ug/m3	< 20 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.9 U	< 2.0 U	< 1.9 U	< 57 U	< 1.9 U	< 1.9 U	< 19 U	< 19 U	< 19 U	
Tetrachloroethene (Tetrachloroethylene)	ug/m3	250	89 J,O	16	49	8.5	9.5	0.39 J,O	160	5.5	1.2 J,O	560	210	210	
Toluene	ug/m3	2.5 J,O	0.24 J,O	0.18 J,O	< 1.8 U	1.1 J,O	< 1.8 U	0.32 J,O	< 52 U	< 1.7 U	0.36 J,O	< 17 U	21	20	
Trichloroethene (Trichloroethylene)	ug/m3	5.6 J,O	< 2.6 U	< 2.6 U	< 2.6 U	< 2.4 U	< 2.5 U	< 2.5 U	< 74 U	< 2.5 U	< 2.4 U	< 25 U	< 25 U	< 25 U	
Trichlorofluoromethane (Freon 11)	ug/m3	< 27 U	1.5 J,O	2.7	5.5	1.9 J,O	2.7	1.5 J,O	7.0 J,O	1.6 J,O	1.6 J,O	1.5 J,O	1.7 J,O	1.9 J,O	
Vinyl chloride	ug/m3	12 J,O	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 35 U	< 1.2 U	1.7	< 12 U	< 12 U	< 12 U	
cis-1,2-Dichloroethene	ug/m3	4.0 J,O	< 1.9 U	< 1.9 U	< 1.9 U	< 1.8 U	< 1.9 U	< 1.8 U	< 54 U	< 1.8 U	< 1.8 U	< 18 U	< 18 U	<	

**APPENDIX A**

**SITE MAP**

**Figure 1**  
**Lees Lane Landfill Soil Gas Sampling Stations**  
**June 2013**



**APPENDIX B**  
**SITE PHOTOGRAPHS**



**Photo 1 Sample Station LLL1 facing north**



**Photo 2 Sample Station LLL2 facing west**



**Photo 3 Split Sample Location LLL3**



**Photo 4 Sample Location LLL4 facing west**



**Photo 5 Sample Location LLL5 facing southwest**



**Photo 6 Sample Location GMW1 facing southwest**



**Photo 7 Split Sample Location GMW2 facing northeast**



**Photo 8 Sample Location GMW3 facing north**



**Photo 9** Sample Location G1 facing south



**Photo 10** Sample Location G2 facing southwest



**Photo 11 Sample Location G3 facing northwest**



**Photo 12 Sample Location G4 facing southeast**



**Photo 13 Sample Location G5 facing northeast**

**APPENDIX C**

**SESD METHANE ANALYTICAL REPORT**  
**(28 Pages)**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Kristin Trapp

August 21, 2013

4SESD-ASB

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report

Project: 13-0364, Lee's Lane Landfill Satellite Site

Superfund Remedial

**FROM:** Kristin Trapp

OCS Chemist

**THRU:** Floyd Wellborn, Chief

ASB Organic Chemistry Section

**TO:** Tim Slagle

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/secd/asbsop](http://www.epa.gov/region4/secd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

**Volatile Organics (VOA)**

Natural attenuation compounds

ASB V100 (Air)

None



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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**Sample Disposal Policy**

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov), and provide a reason for holding samples beyond 60 days

cc: Nardina Turner



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Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Kristin Trapp

**SAMPLES INCLUDED IN THIS REPORT**

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
LLL TB	E132402-01	Trip Blank Air	6/4/13 13:00	6/10/13 9:20
G1LSG0613	E132402-02	Soil Gas	6/5/13 15:30	6/10/13 9:20
G1RSG0613	E132402-03	Soil Gas	6/5/13 15:18	6/10/13 9:20
G2LSG0613	E132402-04	Soil Gas	6/5/13 17:46	6/10/13 9:20
G2RSG0613	E132402-05	Soil Gas	6/5/13 17:30	6/10/13 9:20
G3LSG0613	E132402-06	Soil Gas	6/6/13 09:10	6/10/13 9:20
G3RSG0613	E132402-07	Soil Gas	6/6/13 09:06	6/10/13 9:20
G4LSG0613	E132402-08	Soil Gas	6/6/13 11:17	6/10/13 9:20
G4RSG0613	E132402-09	Soil Gas	6/6/13 12:15	6/10/13 9:20
G5LSG0613	E132402-10	Soil Gas	6/6/13 13:02	6/10/13 9:20
G5RSG0613	E132402-11	Soil Gas	6/6/13 12:56	6/10/13 9:20
GMW1SG0613	E132402-12	Soil Gas	6/5/13 11:55	6/10/13 9:20
GMW2SG0613	E132402-13	Soil Gas	6/5/13 12:34	6/10/13 9:20
GMW2SSG0613	E132402-14	Soil Gas	6/5/13 12:34	6/10/13 9:20
GMW3SG0613	E132402-15	Soil Gas	6/5/13 14:50	6/10/13 9:20
LLL1SG0613	E132402-16	Soil Gas	6/4/13 13:20	6/10/13 9:20
LLL2SG0613	E132402-17	Soil Gas	6/4/13 14:44	6/10/13 9:20
LLL3SG0613	E132402-18	Soil Gas	6/4/13 16:04	6/10/13 9:20
LLL3SSG0613	E132402-19	Soil Gas	6/4/13 16:04	6/10/13 9:20
LLL4SG0613	E132402-20	Soil Gas	6/4/13 16:44	6/10/13 9:20
LLL5SG0613	E132402-21	Soil Gas	6/5/13 10:23	6/10/13 9:20



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Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Kristin Trapp

## DATA QUALIFIER DEFINITIONS

U The analyte was not detected at or above the reporting limit.

## ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ([www.epa.gov/srs](http://www.epa.gov/srs)), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

ISO The test, if analyzed after June 26, 2012, is accredited under the EPA Region 4 ASB's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACCLASS. Refer to certificate and scope of accreditation AT-1691.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Kristin Trapp

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

**Sample ID:** LLL TB

**Lab ID:** E132402-01

**Station ID:**

**Matrix:** Trip Blank Air

**Date Collected:** 6/4/13 13:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.7	U	ppmv	4.7	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G1LSG0613

Lab ID: E132402-02

Station ID: G1L

Matrix: Soil Gas

Date Collected: 6/5/13 15:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	5.9		ppmv	4.5	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G1RSG0613

Lab ID: E132402-03

Station ID: G1R

Matrix: Soil Gas

Date Collected: 6/5/13 15:18

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.4	U	ppmv	4.4	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G2LSG0613

Lab ID: E132402-04

Station ID: G2L

Matrix: Soil Gas

Date Collected: 6/5/13 17:46

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.5	U	ppmv	4.5	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G2RSG0613

Lab ID: E132402-05

Station ID: G2R

Matrix: Soil Gas

Date Collected: 6/5/13 17:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.5	U	ppmv	4.5	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G3LSG0613

Lab ID: E132402-06

Station ID: G3L

Matrix: Soil Gas

Date Collected: 6/6/13 9:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G3RSG0613

Lab ID: E132402-07

Station ID: G3R

Matrix: Soil Gas

Date Collected: 6/6/13 9:06

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.4	U	ppmv	4.4	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G4LSG0613

Lab ID: E132402-08

Station ID: G4L

Matrix: Soil Gas

Date Collected: 6/6/13 11:17

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.3	U	ppmv	4.3	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G4RSG0613

Lab ID: E132402-09

Station ID: G4R

Matrix: Soil Gas

Date Collected: 6/6/13 12:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.3	U	ppmv	4.3	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G5LSG0613

Lab ID: E132402-10

Station ID: G5L

Matrix: Soil Gas

Date Collected: 6/6/13 13:02

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.3	U	ppmv	4.3	6/11/13 10:30	6/12/13 9:50	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: G5RSG0613

Lab ID: E132402-11

Station ID: G5R

Matrix: Soil Gas

Date Collected: 6/6/13 12:56

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: GMW1SG0613

Lab ID: E132402-12

Station ID: GMW1

Matrix: Soil Gas

Date Collected: 6/5/13 11:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: GMW2SG0613

Lab ID: E132402-13

Station ID: GMW2

Matrix: Soil Gas

Date Collected: 6/5/13 12:34

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: GMW2SSG0613

Lab ID: E132402-14

Station ID: GMW2

Matrix: Soil Gas

Date Collected: 6/5/13 12:34

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: GMW3SG0613

Lab ID: E132402-15

Station ID: GMW3

Matrix: Soil Gas

Date Collected: 6/5/13 14:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.3	U	ppmv	4.3	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: LLL1SG0613

Lab ID: E132402-16

Station ID: LLL1

Matrix: Soil Gas

Date Collected: 6/4/13 13:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

**Sample ID:** LLL2SG0613

**Lab ID:** E132402-17

**Station ID:** LLL2

**Matrix:** Soil Gas

**Date Collected:** 6/4/13 14:44

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: LLL3SG0613

Lab ID: E132402-18

Station ID: LLL3

Matrix: Soil Gas

Date Collected: 6/4/13 16:04

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.1	U	ppmv	4.1	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: LLL3SSG0613

Lab ID: E132402-19

Station ID: LLL3

Matrix: Soil Gas

Date Collected: 6/4/13 16:04

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.2	U	ppmv	4.2	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: LLL4SG0613

Lab ID: E132402-20

Station ID: LLL4

Matrix: Soil Gas

Date Collected: 6/4/13 16:44

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.1	U	ppmv	4.1	6/11/13 10:10	6/13/13 12:00	ASB V100



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## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID: LLL5SG0613

Lab ID: E132402-21

Station ID: LLL5

Matrix: Soil Gas

Date Collected: 6/5/13 10:23

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-82-8	Methane	4.1	U	ppmv	4.1	6/11/13 10:10	6/13/13 12:00	ASB V100



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**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Notes
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**Batch 1306034 - V TO-15 Air Canister**

Blank (1306034-BLK1) Prepared &amp; Analyzed: 06/12/13

**ASB V100**

Methane U 2.0 ppmv U

## LCS (1306034-BS1)

Prepared &amp; Analyzed: 06/12/13

**ASB V100**

Methane 10.670 ppmv 10.000 107 70-130

## LCS Dup (1306034-BSD1)

Prepared &amp; Analyzed: 06/12/13

**ASB V100**

Methane 10.590 ppmv 10.000 106 70-130 0.753 12

## Duplicate (1306034-DUP1)

Source: E132402-02 Prepared &amp; Analyzed: 06/12/13

**ASB V100**

Methane 6.3806 4.5 ppmv 5.8591 8.52 30

## MRL Verification (1306034-PS1)

Prepared &amp; Analyzed: 06/12/13

**ASB V100**

Methane 2.2900 ppmv 2.0000 114 62-140 MRL-5

**Batch 1306044 - V TO-15 Air Canister**

Blank (1306044-BLK1) Prepared &amp; Analyzed: 06/13/13

**ASB V100**

Methane U 2.0 ppmv U

## LCS (1306044-BS1)

Prepared &amp; Analyzed: 06/13/13

**ASB V100**

Methane 9.0100 ppmv 10.000 90.1 70-130

## LCS Dup (1306044-BSD1)

Prepared &amp; Analyzed: 06/13/13

**ASB V100**

Methane 10.220 ppmv 10.000 102 70-130 12.6 20

## Duplicate (1306044-DUP1)

Source: E132402-15 Prepared: 06/11/13 Analyzed: 06/13/13

**ASB V100**

Methane 3.3237 4.3 ppmv 3.4574 3.94 30 XD-1, U



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**Volatile Organics (VOA) - Quality Control**

**US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306044 - V TO-15 Air Canister**

MRL Verification (1306044-PS1)

Prepared & Analyzed: 06/13/13

**ASB V100**

Methane	1.7100	ppmv	2.0000	85.5	62-140	MRL-5
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**Notes and Definitions for QC Samples**

U The analyte was not detected at or above the reporting limit.

MRL-5 MRL verification for Air matrix

XD-1 Duplicate results less than MRL

**APPENDIX D**

**SESD**

**VOLATILE ORGANIC COMPOUND (VOC)**

**ANALYTICAL REPORT**

**(106 Pages)**



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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**September 30, 2013**

**4SESD-ASB**

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report

Project: 13-0364, Lee's Lane Landfill Satellite Site

Superfund Remedial

**FROM:** Sallie Hale

OCS Chemist

**THRU:** Floyd Wellborn, Chief

ASB Organic Chemistry Section

**TO:** Tim Slagle

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at [www.epa.gov/region4/secd/asbsop](http://www.epa.gov/region4/secd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

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**Volatile Organics (VOA)**

Volatile organic compounds

EPA TO-15 (Air)

ISO



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**Sample Disposal Policy**

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov), and provide a reason for holding samples beyond 60 days

cc: Nardina Turner



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**SAMPLES INCLUDED IN THIS REPORT**

**Project: 13-0364, Lee's Lane Landfill Satellite Site**

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
LLL TB	E132402-01	Trip Blank Air	6/4/13 13:00	6/10/13 9:20
G1LSG0613	E132402-02	Soil Gas	6/5/13 15:30	6/10/13 9:20
G1RSG0613	E132402-03	Soil Gas	6/5/13 15:18	6/10/13 9:20
G2LSG0613	E132402-04	Soil Gas	6/5/13 17:46	6/10/13 9:20
G2RSG0613	E132402-05	Soil Gas	6/5/13 17:30	6/10/13 9:20
G3LSG0613	E132402-06	Soil Gas	6/6/13 09:10	6/10/13 9:20
G3RSG0613	E132402-07	Soil Gas	6/6/13 09:06	6/10/13 9:20
G4LSG0613	E132402-08	Soil Gas	6/6/13 11:17	6/10/13 9:20
G4RSG0613	E132402-09	Soil Gas	6/6/13 12:15	6/10/13 9:20
G5LSG0613	E132402-10	Soil Gas	6/6/13 13:02	6/10/13 9:20
G5RSG0613	E132402-11	Soil Gas	6/6/13 12:56	6/10/13 9:20
GMW1SG0613	E132402-12	Soil Gas	6/5/13 11:55	6/10/13 9:20
GMW2SG0613	E132402-13	Soil Gas	6/5/13 12:34	6/10/13 9:20
GMW2SSG0613	E132402-14	Soil Gas	6/5/13 12:34	6/10/13 9:20
GMW3SG0613	E132402-15	Soil Gas	6/5/13 14:50	6/10/13 9:20
LLL1SG0613	E132402-16	Soil Gas	6/4/13 13:20	6/10/13 9:20
LLL2SG0613	E132402-17	Soil Gas	6/4/13 14:44	6/10/13 9:20
LLL3SG0613	E132402-18	Soil Gas	6/4/13 16:04	6/10/13 9:20
LLL3SSG0613	E132402-19	Soil Gas	6/4/13 16:04	6/10/13 9:20
LLL4SG0613	E132402-20	Soil Gas	6/4/13 16:44	6/10/13 9:20
LLL5SG0613	E132402-21	Soil Gas	6/5/13 10:23	6/10/13 9:20



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## DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
D-4	MRL elevated due to interferences.
J	The identification of the analyte is acceptable; the reported value is an estimate.
O-2	Result greater than MDL but less than MRL.
OC-1	Analyte concentration low in continuing calibration verification standard
OC-2	Analyte concentration high in continuing calibration verification standard
OC-3	Analyte calibration criteria not met
OC-4	Result greater than the highest point on the calibration curve
OC-5	Calibration check standard less than method control limits.
OC-6	Calibration check standard greater than method control limits.
OI-1	Internal standard was outside of method control limits.
OS-5	Surrogate recovery is higher than established control limits

## ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
ISO	The test, if analyzed after June 26, 2012, is accredited under the EPA Region 4 ASB's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACCLASS. Refer to certificate and scope of accreditation AT-1691.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL TB****Lab ID: E132402-01****Station ID:****Matrix: Trip Blank Air****Date Collected: 6/4/13 13:00**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	4.3	U	ug/m3	4.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
71-55-6	1,1,1-Trichloroethane	2.7	U	ug/m3	2.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.4	U	ug/m3	3.4	6/26/13 10:42	6/26/13 22:49	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	3.7	U	ug/m3	3.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.7	U	ug/m3	2.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-34-3	1,1-Dichloroethane	2.0	U	ug/m3	2.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.9	U	ug/m3	1.9	6/26/13 10:42	6/26/13 22:49	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.2	U, J, QC-3	ug/m3	3.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.4	U	ug/m3	2.4	6/26/13 10:42	6/26/13 22:49	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.8	U	ug/m3	3.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.9	U	ug/m3	2.9	6/26/13 10:42	6/26/13 22:49	EPA TO-15
107-06-2	1,2-Dichloroethane	2.0	U	ug/m3	2.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.3	U	ug/m3	2.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	3.3	U	ug/m3	3.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.3	U	ug/m3	2.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
106-99-0	1,3-Butadiene	2.2	U	ug/m3	2.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
541-73-1	1,3-Dichlorobenzene	3.0	U	ug/m3	3.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
106-46-7	1,4-Dichlorobenzene	3.0	U, J, QC-6	ug/m3	3.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
123-91-1	1,4-Dioxane	1.8	U, J, QC-6	ug/m3	1.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
107-05-1	3-Chloropropene	3.1	U	ug/m3	3.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
622-96-8	4-Ethyltoluene	5.0	U	ug/m3	5.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
67-64-1	Acetone	1.3	U	ug/m3	1.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
107-13-1	Acrylonitrile	1.0	U	ug/m3	1.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
71-43-2	Benzene	1.6	U	ug/m3	1.6	6/26/13 10:42	6/26/13 22:49	EPA TO-15
100-44-7	Benzyl chloride	2.7	U, J, QC-6	ug/m3	2.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-27-4	Bromodichloromethane	3.4	U	ug/m3	3.4	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-25-2	Bromoform	5.3	U, J, QC-6	ug/m3	5.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLLTB****Lab ID: E132402-01****Station ID:****Matrix: Trip Blank Air****Date Collected: 6/4/13 13:00**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.9	U	ug/m3	1.9	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-15-0	Carbon disulfide	1.6	U	ug/m3	1.6	6/26/13 10:42	6/26/13 22:49	EPA TO-15
56-23-5	Carbon Tetrachloride	3.1	U	ug/m3	3.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
108-90-7	Chlorobenzene	2.3	U	ug/m3	2.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-00-3	Chloroethane	1.3	U	ug/m3	1.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
67-66-3	Chloroform	2.4	U	ug/m3	2.4	6/26/13 10:42	6/26/13 22:49	EPA TO-15
74-87-3	Chloromethane	1.0	U	ug/m3	1.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	2.0	U	ug/m3	2.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.2	U	ug/m3	2.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
110-82-7	Cyclohexane	1.8	U	ug/m3	1.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
124-48-1	Dibromochloromethane	4.3	U	ug/m3	4.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	2.3	U	ug/m3	2.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
141-78-6	Ethyl Acetate	1.8	U	ug/m3	1.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
100-41-4	Ethyl Benzene	2.2	U	ug/m3	2.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
142-82-5	Heptane	2.1	U	ug/m3	2.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
87-68-3	Hexachlorobutadiene	5.2	U, J, QC-3	ug/m3	5.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
110-54-3	Hexane	1.8	U	ug/m3	1.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
26635-64-3	Isooctane	2.4	U	ug/m3	2.4	6/26/13 10:42	6/26/13 22:49	EPA TO-15
67-63-0	Isopropanol	1.3	U, J, QC-1, QC-3	ug/m3	1.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.1	U, J, QC-3, QC-6	ug/m3	2.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
78-93-3	Methyl Ethyl Ketone	1.5	U	ug/m3	1.5	6/26/13 10:42	6/26/13 22:49	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.1	U	ug/m3	2.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.9	U	ug/m3	1.9	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-09-2	Methylene Chloride	1.7	U	ug/m3	1.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
95-47-6	o-Xylene	2.2	U	ug/m3	2.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
100-42-5	Styrene	2.1	U, J, QC-6	ug/m3	2.1	6/26/13 10:42	6/26/13 22:49	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	3.3	U	ug/m3	3.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
109-99-9	Tetrahydrofuran	1.5	U	ug/m3	1.5	6/26/13 10:42	6/26/13 22:49	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL TB****Lab ID: E132402-01****Station ID:****Matrix: Trip Blank Air****Date Collected: 6/4/13 13:00**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
108-88-3	Toluene	1.9	U	ug/m3	1.9	6/26/13 10:42	6/26/13 22:49	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	2.0	U	ug/m3	2.0	6/26/13 10:42	6/26/13 22:49	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.3	U	ug/m3	2.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.7	U	ug/m3	2.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	2.7	U	ug/m3	2.7	6/26/13 10:42	6/26/13 22:49	EPA TO-15
108-05-4	Vinyl acetate	1.8	U	ug/m3	1.8	6/26/13 10:42	6/26/13 22:49	EPA TO-15
593-60-2	Vinyl bromide	2.2	U	ug/m3	2.2	6/26/13 10:42	6/26/13 22:49	EPA TO-15
75-01-4	Vinyl chloride	1.3	U	ug/m3	1.3	6/26/13 10:42	6/26/13 22:49	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G1LSG0613****Lab ID: E132402-02****Station ID: G1L****Matrix: Soil Gas****Date Collected: 6/5/13 15:30**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	42	U	ug/m3	42	7/01/13 15:44	7/02/13 18:14	EPA TO-15
71-55-6	1,1,1-Trichloroethane	26	U	ug/m3	26	7/01/13 15:44	7/02/13 18:14	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	33	U	ug/m3	33	7/01/13 15:44	7/02/13 18:14	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	36	U	ug/m3	36	7/01/13 15:44	7/02/13 18:14	EPA TO-15
79-00-5	1,1,2-Trichloroethane	26	U	ug/m3	26	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-34-3	1,1-Dichloroethane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 18:14	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	31	U, J, QC-3, QC-5	ug/m3	31	7/01/13 15:44	7/02/13 18:14	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	23	U	ug/m3	23	7/01/13 15:44	7/02/13 18:14	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	37	U	ug/m3	37	7/01/13 15:44	7/02/13 18:14	EPA TO-15
95-50-1	1,2-Dichlorobenzene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 18:14	EPA TO-15
107-06-2	1,2-Dichloroethane	20	U	ug/m3	20	7/01/13 15:44	7/02/13 18:14	EPA TO-15
78-87-5	1,2-Dichloroproppane	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	120		ug/m3	31	7/01/13 15:44	7/02/13 18:14	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	23	U	ug/m3	23	7/01/13 15:44	7/02/13 18:14	EPA TO-15
106-99-0	1,3-Butadiene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
541-73-1	1,3-Dichlorobenzene	29	U	ug/m3	29	7/01/13 15:44	7/02/13 18:14	EPA TO-15
106-46-7	1,4-Dichlorobenzene	29	U	ug/m3	29	7/01/13 15:44	7/02/13 18:14	EPA TO-15
123-91-1	1,4-Dioxane	18	U, J, QC-5	ug/m3	18	7/01/13 15:44	7/02/13 18:14	EPA TO-15
107-05-1	3-Chloropropene	30	U	ug/m3	30	7/01/13 15:44	7/02/13 18:14	EPA TO-15
622-96-8	4-Ethyltoluene	48	U	ug/m3	48	7/01/13 15:44	7/02/13 18:14	EPA TO-15
67-64-1	Acetone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 18:14	EPA TO-15
107-13-1	Acrylonitrile	9.7	U	ug/m3	9.7	7/01/13 15:44	7/02/13 18:14	EPA TO-15
71-43-2	Benzene	15	U	ug/m3	15	7/01/13 15:44	7/02/13 18:14	EPA TO-15
100-44-7	Benzyl chloride	26	U, J, QC-5	ug/m3	26	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-27-4	Bromodichloromethane	33	U	ug/m3	33	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-25-2	Bromoform	51	U	ug/m3	51	7/01/13 15:44	7/02/13 18:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G1LSG0613****Lab ID: E132402-02****Station ID: G1L****Matrix: Soil Gas****Date Collected: 6/5/13 15:30**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-15-0	Carbon disulfide	79		ug/m3	15	7/01/13 15:44	7/02/13 18:14	EPA TO-15
56-23-5	Carbon Tetrachloride	30	U	ug/m3	30	7/01/13 15:44	7/02/13 18:14	EPA TO-15
108-90-7	Chlorobenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-00-3	Chloroethane	13	U	ug/m3	13	7/01/13 15:44	7/02/13 18:14	EPA TO-15
67-66-3	Chloroform	92		ug/m3	23	7/01/13 15:44	7/02/13 18:14	EPA TO-15
74-87-3	Chloromethane	9.7	U	ug/m3	9.7	7/01/13 15:44	7/02/13 18:14	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	4.0	J, Q-2	ug/m3	19	7/01/13 15:44	7/02/13 18:14	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
110-82-7	Cyclohexane	1.8	J, Q-2	ug/m3	17	7/01/13 15:44	7/02/13 18:14	EPA TO-15
124-48-1	Dibromochloromethane	42	U	ug/m3	42	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	4.5	J, Q-2	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
141-78-6	Ethyl Acetate	18	U	ug/m3	18	7/01/13 15:44	7/02/13 18:14	EPA TO-15
100-41-4	Ethyl Benzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 18:14	EPA TO-15
142-82-5	Heptane	20	U	ug/m3	20	7/01/13 15:44	7/02/13 18:14	EPA TO-15
87-68-3	Hexachlorobutadiene	50	U, J, QC-5	ug/m3	50	7/01/13 15:44	7/02/13 18:14	EPA TO-15
110-54-3	Hexane	17	U	ug/m3	17	7/01/13 15:44	7/02/13 18:14	EPA TO-15
26635-64-3	Isooctane	23	U	ug/m3	23	7/01/13 15:44	7/02/13 18:14	EPA TO-15
67-63-0	Isopropanol	170	J, QC-5	ug/m3	12	7/01/13 15:44	7/02/13 18:14	EPA TO-15
591-78-6	Methyl Butyl Ketone	20	U	ug/m3	20	7/01/13 15:44	7/02/13 18:14	EPA TO-15
78-93-3	Methyl Ethyl Ketone	15	U	ug/m3	15	7/01/13 15:44	7/02/13 18:14	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	20	U	ug/m3	20	7/01/13 15:44	7/02/13 18:14	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	19	U	ug/m3	19	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-09-2	Methylene Chloride	16	U	ug/m3	16	7/01/13 15:44	7/02/13 18:14	EPA TO-15
95-47-6	o-Xylene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 18:14	EPA TO-15
100-42-5	Styrene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 18:14	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	250		ug/m3	32	7/01/13 15:44	7/02/13 18:14	EPA TO-15
109-99-9	Tetrahydrofuran	15	U	ug/m3	15	7/01/13 15:44	7/02/13 18:14	EPA TO-15
108-88-3	Toluene	2.5	J, Q-2	ug/m3	18	7/01/13 15:44	7/02/13 18:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G1LSG0613**Lab ID:** E132402-02**Station ID:** G1L**Matrix:** Soil Gas**Date Collected:** 6/5/13 15:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	19	U	ug/m3	19	7/01/13 15:44	7/02/13 18:14	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	5.6	J, Q-2	ug/m3	26	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	27	U	ug/m3	27	7/01/13 15:44	7/02/13 18:14	EPA TO-15
108-05-4	Vinyl acetate	17	U	ug/m3	17	7/01/13 15:44	7/02/13 18:14	EPA TO-15
593-60-2	Vinyl bromide	22	U	ug/m3	22	7/01/13 15:44	7/02/13 18:14	EPA TO-15
75-01-4	Vinyl chloride	12	J, Q-2	ug/m3	12	7/01/13 15:44	7/02/13 18:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G1RSG0613****Lab ID: E132402-03****Station ID: G1R****Matrix: Soil Gas****Date Collected: 6/5/13 15:18**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.2	U	ug/m3	4.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
71-55-6	1,1,1-Trichloroethane	2.6	U	ug/m3	2.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/02/13 23:03	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.51	J, Q-2, QS-5	ug/m3	3.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.6	U	ug/m3	2.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-34-3	1,1-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.1	U, J, QC-3, QC-5	ug/m3	3.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/02/13 23:03	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.6	U	ug/m3	3.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	52	J, QS-5	ug/m3	3.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
123-91-1	1,4-Dioxane	1.8	U, J, QC-5	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
107-05-1	3-Chloropropene	3.0	U	ug/m3	3.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
622-96-8	4-Ethyltoluene	4.7	U	ug/m3	4.7	7/01/13 15:44	7/02/13 23:03	EPA TO-15
67-64-1	Acetone	8.9	J, QS-5	ug/m3	1.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
107-13-1	Acrylonitrile	0.96	U	ug/m3	0.96	7/01/13 15:44	7/02/13 23:03	EPA TO-15
71-43-2	Benzene	1.5	U	ug/m3	1.5	7/01/13 15:44	7/02/13 23:03	EPA TO-15
100-44-7	Benzyl chloride	2.5	U, J, QC-5	ug/m3	2.5	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-27-4	Bromodichloromethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-25-2	Bromoform	5.0	U	ug/m3	5.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G1RSG0613****Lab ID: E132402-03****Station ID: G1R****Matrix: Soil Gas****Date Collected: 6/5/13 15:18**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-15-0	Carbon disulfide	1.1	J, Q-2, QS-5	ug/m3	1.5	7/01/13 15:44	7/02/13 23:03	EPA TO-15
56-23-5	Carbon Tetrachloride	2.9	U	ug/m3	2.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
108-90-7	Chlorobenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
67-66-3	Chloroform	0.87	J, Q-2, QS-5	ug/m3	2.3	7/01/13 15:44	7/02/13 23:03	EPA TO-15
74-87-3	Chloromethane	0.96	U	ug/m3	0.96	7/01/13 15:44	7/02/13 23:03	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
110-82-7	Cyclohexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:03	EPA TO-15
124-48-1	Dibromochloromethane	4.2	U	ug/m3	4.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	4.0	J, QS-5	ug/m3	2.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
141-78-6	Ethyl Acetate	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
100-41-4	Ethyl Benzene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
142-82-5	Heptane	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
87-68-3	Hexachlorobutadiene	5.0	U, J, QC-5	ug/m3	5.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
110-54-3	Hexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:03	EPA TO-15
26635-64-3	Isooctane	2.3	U	ug/m3	2.3	7/01/13 15:44	7/02/13 23:03	EPA TO-15
67-63-0	Isopropanol	1.2	U, J, QC-5	ug/m3	1.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
78-93-3	Methyl Ethyl Ketone	2.8	J, QS-5	ug/m3	1.4	7/01/13 15:44	7/02/13 23:03	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-09-2	Methylene Chloride	1.6	U	ug/m3	1.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
95-47-6	o-Xylene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
100-42-5	Styrene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:03	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	89	J, QS-5	ug/m3	3.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/01/13 15:44	7/02/13 23:03	EPA TO-15
108-88-3	Toluene	0.24	J, Q-2, QS-5	ug/m3	1.8	7/01/13 15:44	7/02/13 23:03	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G1RSG0613**Lab ID:** E132402-03**Station ID:** G1R**Matrix:** Soil Gas**Date Collected:** 6/5/13 15:18

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:03	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.6	U	ug/m3	2.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.5	J, Q-2, QS-5	ug/m3	2.6	7/01/13 15:44	7/02/13 23:03	EPA TO-15
108-05-4	Vinyl acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:03	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:03	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/01/13 15:44	7/02/13 23:03	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G2LSG0613****Lab ID: E132402-04****Station ID: G2L****Matrix: Soil Gas****Date Collected: 6/5/13 17:46**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	4.2	U	ug/m3	4.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
71-55-6	1,1,1-Trichloroethane	1.6	J, Q-2	ug/m3	2.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.58	J, Q-2	ug/m3	3.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.6	U	ug/m3	2.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-34-3	1,1-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.1	U, J, QC-3, QC-5	ug/m3	3.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.7	U	ug/m3	3.7	7/01/13 15:44	7/02/13 23:53	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	21		ug/m3	3.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
123-91-1	1,4-Dioxane	1.8	U, J, QC-5	ug/m3	1.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
107-05-1	3-Chloropropene	3.0	U	ug/m3	3.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
622-96-8	4-Ethyltoluene	4.8	U	ug/m3	4.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
67-64-1	Acetone	9.4		ug/m3	1.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
107-13-1	Acrylonitrile	0.96	U	ug/m3	0.96	7/01/13 15:44	7/02/13 23:53	EPA TO-15
71-43-2	Benzene	1.5	U	ug/m3	1.5	7/01/13 15:44	7/02/13 23:53	EPA TO-15
100-44-7	Benzyl chloride	2.6	U, J, QC-5	ug/m3	2.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-27-4	Bromodichloromethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-25-2	Bromoform	5.1	U	ug/m3	5.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G2LSG0613****Lab ID: E132402-04****Station ID: G2L****Matrix: Soil Gas****Date Collected: 6/5/13 17:46**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-15-0	Carbon disulfide	2.4		ug/m3	1.5	7/01/13 15:44	7/02/13 23:53	EPA TO-15
56-23-5	Carbon Tetrachloride	0.25	J, Q-2	ug/m3	3.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
108-90-7	Chlorobenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-00-3	Chloroethane	1.3	U	ug/m3	1.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
67-66-3	Chloroform	6.9		ug/m3	2.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
74-87-3	Chloromethane	0.96	U	ug/m3	0.96	7/01/13 15:44	7/02/13 23:53	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
110-82-7	Cyclohexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:53	EPA TO-15
124-48-1	Dibromochloromethane	4.2	U	ug/m3	4.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	16		ug/m3	2.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
141-78-6	Ethyl Acetate	1.8	U	ug/m3	1.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15
100-41-4	Ethyl Benzene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
142-82-5	Heptane	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
87-68-3	Hexachlorobutadiene	5.0	U, J, QC-5	ug/m3	5.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
110-54-3	Hexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:53	EPA TO-15
26635-64-3	Isooctane	2.3	U	ug/m3	2.3	7/01/13 15:44	7/02/13 23:53	EPA TO-15
67-63-0	Isopropanol	1.2	U, J, QC-5	ug/m3	1.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
78-93-3	Methyl Ethyl Ketone	1.5		ug/m3	1.5	7/01/13 15:44	7/02/13 23:53	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-09-2	Methylene Chloride	1.6	U	ug/m3	1.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
95-47-6	o-Xylene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
100-42-5	Styrene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/02/13 23:53	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	16		ug/m3	3.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
109-99-9	Tetrahydrofuran	1.5	U	ug/m3	1.5	7/01/13 15:44	7/02/13 23:53	EPA TO-15
108-88-3	Toluene	0.18	J, Q-2	ug/m3	1.8	7/01/13 15:44	7/02/13 23:53	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G2LSG0613**Lab ID:** E132402-04**Station ID:** G2L**Matrix:** Soil Gas**Date Collected:** 6/5/13 17:46

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/02/13 23:53	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.6	U	ug/m3	2.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	2.7		ug/m3	2.6	7/01/13 15:44	7/02/13 23:53	EPA TO-15
108-05-4	Vinyl acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/02/13 23:53	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/01/13 15:44	7/02/13 23:53	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/01/13 15:44	7/02/13 23:53	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G2RSG0613****Lab ID: E132402-05****Station ID: G2R****Matrix: Soil Gas****Date Collected: 6/5/13 17:30**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.2	U	ug/m3	4.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
71-55-6	1,1,1-Trichloroethane	6.4		ug/m3	2.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.76	J, Q-2	ug/m3	3.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.6	U	ug/m3	2.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-34-3	1,1-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.1	U, J, QC-3, QC-5	ug/m3	3.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.7	U	ug/m3	3.7	7/01/13 15:44	7/03/13 0:43	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	56		ug/m3	3.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
123-91-1	1,4-Dioxane	1.8	U, J, QC-5	ug/m3	1.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15
107-05-1	3-Chloropropene	3.0	U	ug/m3	3.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
622-96-8	4-Ethyltoluene	4.7	U	ug/m3	4.7	7/01/13 15:44	7/03/13 0:43	EPA TO-15
67-64-1	Acetone	18		ug/m3	1.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
107-13-1	Acrylonitrile	0.96	U	ug/m3	0.96	7/01/13 15:44	7/03/13 0:43	EPA TO-15
71-43-2	Benzene	1.5	U	ug/m3	1.5	7/01/13 15:44	7/03/13 0:43	EPA TO-15
100-44-7	Benzyl chloride	2.5	U, J, QC-5	ug/m3	2.5	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-27-4	Bromodichloromethane	3.3	U	ug/m3	3.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-25-2	Bromoform	5.1	U	ug/m3	5.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G2RSG0613****Lab ID: E132402-05****Station ID: G2R****Matrix: Soil Gas****Date Collected: 6/5/13 17:30**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-15-0	Carbon disulfide	1.5	U	ug/m3	1.5	7/01/13 15:44	7/03/13 0:43	EPA TO-15
56-23-5	Carbon Tetrachloride	2.9	U	ug/m3	2.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
108-90-7	Chlorobenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
67-66-3	Chloroform	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
74-87-3	Chloromethane	0.96	U	ug/m3	0.96	7/01/13 15:44	7/03/13 0:43	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
110-82-7	Cyclohexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 0:43	EPA TO-15
124-48-1	Dibromochloromethane	4.2	U	ug/m3	4.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	42		ug/m3	2.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
141-78-6	Ethyl Acetate	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15
100-41-4	Ethyl Benzene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
142-82-5	Heptane	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
87-68-3	Hexachlorobutadiene	5.0	U, J, QC-5	ug/m3	5.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
110-54-3	Hexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 0:43	EPA TO-15
26635-64-3	Isooctane	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 0:43	EPA TO-15
67-63-0	Isopropanol	1.2	U, J, QC-5	ug/m3	1.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
78-93-3	Methyl Ethyl Ketone	3.2		ug/m3	1.4	7/01/13 15:44	7/03/13 0:43	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-09-2	Methylene Chloride	1.6	U	ug/m3	1.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
95-47-6	o-Xylene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
100-42-5	Styrene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 0:43	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	49		ug/m3	3.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/01/13 15:44	7/03/13 0:43	EPA TO-15
108-88-3	Toluene	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 0:43	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G2RSG0613**Lab ID:** E132402-05**Station ID:** G2R**Matrix:** Soil Gas**Date Collected:** 6/5/13 17:30

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 0:43	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.6	U	ug/m3	2.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	5.5		ug/m3	2.6	7/01/13 15:44	7/03/13 0:43	EPA TO-15
108-05-4	Vinyl acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 0:43	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 0:43	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 0:43	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G3LSG0613****Lab ID: E132402-06****Station ID: G3L****Matrix: Soil Gas****Date Collected: 6/6/13 9:10**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	0.34	J, Q-2	ug/m3	3.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
71-55-6	1,1,1-Trichloroethane	0.97	J, Q-2	ug/m3	2.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	ug/m3	3.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.91	J, Q-2	ug/m3	3.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	2.9	U, J, QC-3, QC-5	ug/m3	2.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 9:30	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.5	U	ug/m3	3.5	7/01/13 15:44	7/03/13 9:30	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.7	U	ug/m3	2.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
78-87-5	1,2-Dichloropropane	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.74	J, Q-2	ug/m3	2.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
106-99-0	1,3-Butadiene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.7	U	ug/m3	2.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.7	U	ug/m3	2.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
622-96-8	4-Ethyltoluene	4.5	U	ug/m3	4.5	7/01/13 15:44	7/03/13 9:30	EPA TO-15
67-64-1	Acetone	18		ug/m3	1.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
107-13-1	Acrylonitrile	0.91	U	ug/m3	0.91	7/01/13 15:44	7/03/13 9:30	EPA TO-15
71-43-2	Benzene	0.40	J, Q-2	ug/m3	1.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-5	ug/m3	2.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-27-4	Bromodichloromethane	3.1	U	ug/m3	3.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-25-2	Bromoform	4.8	U	ug/m3	4.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G3LSG0613****Lab ID: E132402-06****Station ID: G3L****Matrix: Soil Gas****Date Collected: 6/6/13 9:10**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-15-0	Carbon disulfide	16		ug/m3	1.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
56-23-5	Carbon Tetrachloride	0.48	J, Q-2	ug/m3	2.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 9:30	EPA TO-15
67-66-3	Chloroform	0.34	J, Q-2	ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
74-87-3	Chloromethane	2.8		ug/m3	0.91	7/01/13 15:44	7/03/13 9:30	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
110-82-7	Cyclohexane	1.6	U	ug/m3	1.6	7/01/13 15:44	7/03/13 9:30	EPA TO-15
124-48-1	Dibromochloromethane	3.9	U	ug/m3	3.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	3.2		ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
100-41-4	Ethyl Benzene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
142-82-5	Heptane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
87-68-3	Hexachlorobutadiene	4.7	U, J, QC-5	ug/m3	4.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
110-54-3	Hexane	1.6	U	ug/m3	1.6	7/01/13 15:44	7/03/13 9:30	EPA TO-15
26635-64-3	Isooctane	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 9:30	EPA TO-15
67-63-0	Isopropanol	1.1	U, J, QC-5	ug/m3	1.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
591-78-6	Methyl Butyl Ketone	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
78-93-3	Methyl Ethyl Ketone	2.5		ug/m3	1.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	7/01/13 15:44	7/03/13 9:30	EPA TO-15
95-47-6	o-Xylene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
100-42-5	Styrene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 9:30	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	8.5		ug/m3	3.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
108-88-3	Toluene	1.1	J, Q-2	ug/m3	1.7	7/01/13 15:44	7/03/13 9:30	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G3LSG0613**Lab ID:** E132402-06**Station ID:** G3L**Matrix:** Soil Gas**Date Collected:** 6/6/13 9:10

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 9:30	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 9:30	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.4	U	ug/m3	2.4	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.9	J, Q-2	ug/m3	2.5	7/01/13 15:44	7/03/13 9:30	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	7/01/13 15:44	7/03/13 9:30	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 9:30	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 9:30	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G3RSG0613****Lab ID: E132402-07****Station ID: G3R****Matrix: Soil Gas****Date Collected: 6/6/13 9:06**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.1	U	ug/m3	4.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
71-55-6	1,1,1-Trichloroethane	7.6		ug/m3	2.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.2	U	ug/m3	3.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.62	J, Q-2	ug/m3	3.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.6	U	ug/m3	2.6	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-34-3	1,1-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.1	U, J, QC-3, QC-5	ug/m3	3.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 10:20	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.6	U	ug/m3	3.6	7/01/13 15:44	7/03/13 10:20	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	3.9		ug/m3	3.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.8	U	ug/m3	2.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
107-05-1	3-Chloropropene	2.9	U	ug/m3	2.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
622-96-8	4-Ethyltoluene	4.7	U	ug/m3	4.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
67-64-1	Acetone	4.7		ug/m3	1.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
107-13-1	Acrylonitrile	0.94	U	ug/m3	0.94	7/01/13 15:44	7/03/13 10:20	EPA TO-15
71-43-2	Benzene	1.5	U	ug/m3	1.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
100-44-7	Benzyl chloride	2.5	U, J, QC-5	ug/m3	2.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-27-4	Bromodichloromethane	3.2	U	ug/m3	3.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-25-2	Bromoform	5.0	U	ug/m3	5.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G3RSG0613****Lab ID: E132402-07****Station ID: G3R****Matrix: Soil Gas****Date Collected: 6/6/13 9:06**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-15-0	Carbon disulfide	0.11	J, Q-2	ug/m3	1.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
56-23-5	Carbon Tetrachloride	0.22	J, Q-2	ug/m3	2.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
108-90-7	Chlorobenzene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
67-66-3	Chloroform	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
74-87-3	Chloromethane	0.94	U	ug/m3	0.94	7/01/13 15:44	7/03/13 10:20	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.9	U	ug/m3	1.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
110-82-7	Cyclohexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
124-48-1	Dibromochloromethane	4.1	U	ug/m3	4.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	6.5		ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
100-41-4	Ethyl Benzene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15
142-82-5	Heptane	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15
87-68-3	Hexachlorobutadiene	4.9	U, J, QC-5	ug/m3	4.9	7/01/13 15:44	7/03/13 10:20	EPA TO-15
110-54-3	Hexane	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
26635-64-3	Isooctane	2.3	U	ug/m3	2.3	7/01/13 15:44	7/03/13 10:20	EPA TO-15
67-63-0	Isopropanol	1.2	U, J, QC-5	ug/m3	1.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15
78-93-3	Methyl Ethyl Ketone	0.48	J, Q-2	ug/m3	1.4	7/01/13 15:44	7/03/13 10:20	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-09-2	Methylene Chloride	1.6	U	ug/m3	1.6	7/01/13 15:44	7/03/13 10:20	EPA TO-15
95-47-6	o-Xylene	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
100-42-5	Styrene	2.0	U	ug/m3	2.0	7/01/13 15:44	7/03/13 10:20	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	9.5		ug/m3	3.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/01/13 15:44	7/03/13 10:20	EPA TO-15
108-88-3	Toluene	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G3RSG0613**Lab ID:** E132402-07**Station ID:** G3R**Matrix:** Soil Gas**Date Collected:** 6/6/13 9:06

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/01/13 15:44	7/03/13 10:20	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.2	U	ug/m3	2.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.5	U	ug/m3	2.5	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	2.7		ug/m3	2.6	7/01/13 15:44	7/03/13 10:20	EPA TO-15
108-05-4	Vinyl acetate	1.7	U	ug/m3	1.7	7/01/13 15:44	7/03/13 10:20	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/01/13 15:44	7/03/13 10:20	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/01/13 15:44	7/03/13 10:20	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G4LSG0613****Lab ID: E132402-08****Station ID: G4L****Matrix: Soil Gas****Date Collected: 6/6/13 11:17**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.0	U	ug/m3	4.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
71-55-6	1,1,1-Trichloroethane	0.28	J, Q-2	ug/m3	2.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.2	U	ug/m3	3.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.60	J, Q-2	ug/m3	3.4	7/03/13 10:45	7/04/13 1:26	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	1.3	J, Q-2, QC-3, QC-5	ug/m3	3.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	0.34	J, Q-2	ug/m3	2.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.5	U	ug/m3	3.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.7	U	ug/m3	2.7	7/03/13 10:45	7/04/13 1:26	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.54	J, Q-2	ug/m3	3.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
541-73-1	1,3-Dichlorobenzene	0.15	J, Q-2	ug/m3	2.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
106-46-7	1,4-Dichlorobenzene	0.24	J, Q-2	ug/m3	2.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	7/03/13 10:45	7/04/13 1:26	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
622-96-8	4-Ethyltoluene	4.6	U	ug/m3	4.6	7/03/13 10:45	7/04/13 1:26	EPA TO-15
67-64-1	Acetone	35	J, QC-4	ug/m3	1.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
107-13-1	Acrylonitrile	0.92	U	ug/m3	0.92	7/03/13 10:45	7/04/13 1:26	EPA TO-15
71-43-2	Benzene	0.28	J, Q-2	ug/m3	1.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-1, QC-5	ug/m3	2.4	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-27-4	Bromodichloromethane	3.2	U	ug/m3	3.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G4LSG0613****Lab ID: E132402-08****Station ID: G4L****Matrix: Soil Gas****Date Collected: 6/6/13 11:17**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-25-2	Bromoform	4.9	U	ug/m3	4.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-15-0	Carbon disulfide	0.75	J, Q-2	ug/m3	1.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
56-23-5	Carbon Tetrachloride	8.8		ug/m3	2.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
67-66-3	Chloroform	0.54	J, Q-2	ug/m3	2.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
74-87-3	Chloromethane	1.8		ug/m3	0.92	7/03/13 10:45	7/04/13 1:26	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
110-82-7	Cyclohexane	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 1:26	EPA TO-15
124-48-1	Dibromochloromethane	4.0	U	ug/m3	4.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	2.9		ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 1:26	EPA TO-15
100-41-4	Ethyl Benzene	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
142-82-5	Heptane	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
87-68-3	Hexachlorobutadiene	4.8	U, J, QC-1, QC-5	ug/m3	4.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
110-54-3	Hexane	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 1:26	EPA TO-15
26635-64-3	Isooctane	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
67-63-0	Isopropanol	0.64	J, Q-2, QC-1, QC-5	ug/m3	1.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15
591-78-6	Methyl Butyl Ketone	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
78-93-3	Methyl Ethyl Ketone	4.4		ug/m3	1.4	7/03/13 10:45	7/04/13 1:26	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-09-2	Methylene Chloride	0.41	J, Q-2	ug/m3	1.6	7/03/13 10:45	7/04/13 1:26	EPA TO-15
95-47-6	o-Xylene	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 1:26	EPA TO-15
100-42-5	Styrene	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 1:26	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	0.39	J, Q-2	ug/m3	3.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G4LSG0613**Lab ID:** E132402-08**Station ID:** G4L**Matrix:** Soil Gas**Date Collected:** 6/6/13 11:17

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/03/13 10:45	7/04/13 1:26	EPA TO-15
108-88-3	Toluene	0.32	J, Q-2	ug/m3	1.7	7/03/13 10:45	7/04/13 1:26	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 1:26	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.5	U	ug/m3	2.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.5	J, Q-2	ug/m3	2.5	7/03/13 10:45	7/04/13 1:26	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 1:26	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 1:26	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 1:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G4RSG0613****Lab ID: E132402-09****Station ID: G4R****Matrix: Soil Gas****Date Collected: 6/6/13 12:15**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	120	U	ug/m3	120	7/03/13 10:47	7/03/13 19:36	EPA TO-15
71-55-6	1,1,1-Trichloroethane	170		ug/m3	74	7/03/13 10:47	7/03/13 19:36	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	94	U	ug/m3	94	7/03/13 10:47	7/03/13 19:36	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	100	U	ug/m3	100	7/03/13 10:47	7/03/13 19:36	EPA TO-15
79-00-5	1,1,2-Trichloroethane	75	U	ug/m3	75	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-34-3	1,1-Dichloroethane	55	U	ug/m3	55	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	52	U	ug/m3	52	7/03/13 10:47	7/03/13 19:36	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	89	U, J, QC-1, QC-3, QC-5	ug/m3	89	7/03/13 10:47	7/03/13 19:36	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	66	U	ug/m3	66	7/03/13 10:47	7/03/13 19:36	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	100	U	ug/m3	100	7/03/13 10:47	7/03/13 19:36	EPA TO-15
95-50-1	1,2-Dichlorobenzene	80	U	ug/m3	80	7/03/13 10:47	7/03/13 19:36	EPA TO-15
107-06-2	1,2-Dichloroethane	56	U	ug/m3	56	7/03/13 10:47	7/03/13 19:36	EPA TO-15
78-87-5	1,2-Dichloroproppane	63	U	ug/m3	63	7/03/13 10:47	7/03/13 19:36	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	110		ug/m3	89	7/03/13 10:47	7/03/13 19:36	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	64	U	ug/m3	64	7/03/13 10:47	7/03/13 19:36	EPA TO-15
106-99-0	1,3-Butadiene	61	U	ug/m3	61	7/03/13 10:47	7/03/13 19:36	EPA TO-15
541-73-1	1,3-Dichlorobenzene	82	U	ug/m3	82	7/03/13 10:47	7/03/13 19:36	EPA TO-15
106-46-7	1,4-Dichlorobenzene	82	U	ug/m3	82	7/03/13 10:47	7/03/13 19:36	EPA TO-15
123-91-1	1,4-Dioxane	50	U, J, QC-5	ug/m3	50	7/03/13 10:47	7/03/13 19:36	EPA TO-15
107-05-1	3-Chloropropene	85	U	ug/m3	85	7/03/13 10:47	7/03/13 19:36	EPA TO-15
622-96-8	4-Ethyltoluene	140	U	ug/m3	140	7/03/13 10:47	7/03/13 19:36	EPA TO-15
67-64-1	Acetone	33	U	ug/m3	33	7/03/13 10:47	7/03/13 19:36	EPA TO-15
107-13-1	Acrylonitrile	27	U	ug/m3	27	7/03/13 10:47	7/03/13 19:36	EPA TO-15
71-43-2	Benzene	43	U	ug/m3	43	7/03/13 10:47	7/03/13 19:36	EPA TO-15
100-44-7	Benzyl chloride	73	U, J, QC-1, QC-5	ug/m3	73	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-27-4	Bromodichloromethane	94	U	ug/m3	94	7/03/13 10:47	7/03/13 19:36	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G4RSG0613****Lab ID: E132402-09****Station ID: G4R****Matrix: Soil Gas****Date Collected: 6/6/13 12:15**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-25-2	Bromoform	140	U	ug/m3	140	7/03/13 10:47	7/03/13 19:36	EPA TO-15
74-83-9	Bromomethane	52	U	ug/m3	52	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-15-0	Carbon disulfide	43	U	ug/m3	43	7/03/13 10:47	7/03/13 19:36	EPA TO-15
56-23-5	Carbon Tetrachloride	20000		ug/m3	840	7/03/13 10:47	7/03/13 18:47	EPA TO-15
56-23-5	Carbon Tetrachloride	11000	J, QC-4	ug/m3	84	7/03/13 10:47	7/03/13 19:36	EPA TO-15
108-90-7	Chlorobenzene	63	U	ug/m3	63	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-00-3	Chloroethane	36	U	ug/m3	36	7/03/13 10:47	7/03/13 19:36	EPA TO-15
67-66-3	Chloroform	140		ug/m3	65	7/03/13 10:47	7/03/13 19:36	EPA TO-15
74-87-3	Chloromethane	27	U	ug/m3	27	7/03/13 10:47	7/03/13 19:36	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	54	U	ug/m3	54	7/03/13 10:47	7/03/13 19:36	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	61	U	ug/m3	61	7/03/13 10:47	7/03/13 19:36	EPA TO-15
110-82-7	Cyclohexane	49	U	ug/m3	49	7/03/13 10:47	7/03/13 19:36	EPA TO-15
124-48-1	Dibromochloromethane	120	U	ug/m3	120	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	45	J, Q-2	ug/m3	64	7/03/13 10:47	7/03/13 19:36	EPA TO-15
141-78-6	Ethyl Acetate	50	U	ug/m3	50	7/03/13 10:47	7/03/13 19:36	EPA TO-15
100-41-4	Ethyl Benzene	59	U	ug/m3	59	7/03/13 10:47	7/03/13 19:36	EPA TO-15
142-82-5	Heptane	57	U	ug/m3	57	7/03/13 10:47	7/03/13 19:36	EPA TO-15
87-68-3	Hexachlorobutadiene	140	U, J, QC-1, QC-5	ug/m3	140	7/03/13 10:47	7/03/13 19:36	EPA TO-15
110-54-3	Hexane	49	U	ug/m3	49	7/03/13 10:47	7/03/13 19:36	EPA TO-15
26635-64-3	Isooctane	66	U	ug/m3	66	7/03/13 10:47	7/03/13 19:36	EPA TO-15
67-63-0	Isopropanol	34	U, J, QC-1, QC-5	ug/m3	34	7/03/13 10:47	7/03/13 19:36	EPA TO-15
591-78-6	Methyl Butyl Ketone	57	U	ug/m3	57	7/03/13 10:47	7/03/13 19:36	EPA TO-15
78-93-3	Methyl Ethyl Ketone	41	U	ug/m3	41	7/03/13 10:47	7/03/13 19:36	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	57	U	ug/m3	57	7/03/13 10:47	7/03/13 19:36	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	53	U	ug/m3	53	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-09-2	Methylene Chloride	47	U	ug/m3	47	7/03/13 10:47	7/03/13 19:36	EPA TO-15
95-47-6	o-Xylene	60	U	ug/m3	60	7/03/13 10:47	7/03/13 19:36	EPA TO-15
100-42-5	Styrene	57	U	ug/m3	57	7/03/13 10:47	7/03/13 19:36	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G4RSG0613**Lab ID:** E132402-09**Station ID:** G4R**Matrix:** Soil Gas**Date Collected:** 6/6/13 12:15

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
127-18-4	Tetrachloroethene (Tetrachloroethylene)	160		ug/m3	92	7/03/13 10:47	7/03/13 19:36	EPA TO-15
109-99-9	Tetrahydrofuran	41	U	ug/m3	41	7/03/13 10:47	7/03/13 19:36	EPA TO-15
108-88-3	Toluene	52	U	ug/m3	52	7/03/13 10:47	7/03/13 19:36	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	54	U	ug/m3	54	7/03/13 10:47	7/03/13 19:36	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	64	U	ug/m3	64	7/03/13 10:47	7/03/13 19:36	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	74	U	ug/m3	74	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	7.0	J, Q-2	ug/m3	75	7/03/13 10:47	7/03/13 19:36	EPA TO-15
108-05-4	Vinyl acetate	49	U	ug/m3	49	7/03/13 10:47	7/03/13 19:36	EPA TO-15
593-60-2	Vinyl bromide	61	U	ug/m3	61	7/03/13 10:47	7/03/13 19:36	EPA TO-15
75-01-4	Vinyl chloride	35	U	ug/m3	35	7/03/13 10:47	7/03/13 19:36	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G5LSG0613****Lab ID: E132402-10****Station ID: G5L****Matrix: Soil Gas****Date Collected: 6/6/13 13:02**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	4.0	U	ug/m3	4.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
71-55-6	1,1,1-Trichloroethane	0.84	J, Q-2	ug/m3	2.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.2	U	ug/m3	3.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.56	J, Q-2	ug/m3	3.4	7/03/13 10:45	7/04/13 2:15	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	3.0	U, J, QC-1, QC-3, QC-5	ug/m3	3.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.5	U	ug/m3	3.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.7	U	ug/m3	2.7	7/03/13 10:45	7/04/13 2:15	EPA TO-15
107-06-2	1,2-Dichloroethane	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
78-87-5	1,2-Dichloropropane	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.51	J, Q-2	ug/m3	3.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
106-99-0	1,3-Butadiene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	7/03/13 10:45	7/04/13 2:15	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
622-96-8	4-Ethyltoluene	4.6	U	ug/m3	4.6	7/03/13 10:45	7/04/13 2:15	EPA TO-15
67-64-1	Acetone	4.7	U	ug/m3	4.7	7/03/13 10:45	7/04/13 2:15	EPA TO-15
107-13-1	Acrylonitrile	0.92	U	ug/m3	0.92	7/03/13 10:45	7/04/13 2:15	EPA TO-15
71-43-2	Benzene	1.5	U	ug/m3	1.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-1, QC-5	ug/m3	2.4	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-27-4	Bromodichloromethane	3.2	U	ug/m3	3.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G5LSG0613**Lab ID:** E132402-10**Station ID:** G5L**Matrix:** Soil Gas**Date Collected:** 6/6/13 13:02

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-25-2	Bromoform	4.9	U	ug/m3	4.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
74-83-9	Bromomethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-15-0	Carbon disulfide	0.43	J, Q-2	ug/m3	1.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
67-66-3	Chloroform	0.77	J, Q-2	ug/m3	2.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
74-87-3	Chloromethane	0.92	U	ug/m3	0.92	7/03/13 10:45	7/04/13 2:15	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
110-82-7	Cyclohexane	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 2:15	EPA TO-15
124-48-1	Dibromochloromethane	4.0	U	ug/m3	4.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	3.1		ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 2:15	EPA TO-15
100-41-4	Ethyl Benzene	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
142-82-5	Heptane	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
87-68-3	Hexachlorobutadiene	4.8	U, J, QC-1, QC-5	ug/m3	4.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
110-54-3	Hexane	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 2:15	EPA TO-15
26635-64-3	Isooctane	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
67-63-0	Isopropanol	1.2	U, J, QC-1, QC-5	ug/m3	1.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15
591-78-6	Methyl Butyl Ketone	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
78-93-3	Methyl Ethyl Ketone	0.71	J, Q-2	ug/m3	1.4	7/03/13 10:45	7/04/13 2:15	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-09-2	Methylene Chloride	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 2:15	EPA TO-15
95-47-6	o-Xylene	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 2:15	EPA TO-15
100-42-5	Styrene	1.9	U	ug/m3	1.9	7/03/13 10:45	7/04/13 2:15	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	5.5		ug/m3	3.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/03/13 10:45	7/04/13 2:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G5LSG0613**Lab ID:** E132402-10**Station ID:** G5L**Matrix:** Soil Gas**Date Collected:** 6/6/13 13:02

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
108-88-3	Toluene	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 2:15	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 2:15	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.5	U	ug/m3	2.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.6	J, Q-2	ug/m3	2.5	7/03/13 10:45	7/04/13 2:15	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 2:15	EPA TO-15
593-60-2	Vinyl bromide	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 2:15	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 2:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G5RSG0613****Lab ID: E132402-11****Station ID: G5R****Matrix: Soil Gas****Date Collected: 6/6/13 12:56**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	3.9	U	ug/m3	3.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
71-55-6	1,1,1-Trichloroethane	1.4	J, Q-2	ug/m3	2.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	ug/m3	3.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.80	J, Q-2	ug/m3	3.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	0.40	J, Q-2, QC-3, QC-5	ug/m3	2.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.2	U	ug/m3	2.2	6/29/13 17:13	6/30/13 8:34	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.4	U	ug/m3	3.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.6	U	ug/m3	2.6	6/29/13 17:13	6/30/13 8:34	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.48	J, Q-2	ug/m3	2.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
106-99-0	1,3-Butadiene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
541-73-1	1,3-Dichlorobenzene	0.25	J, Q-2	ug/m3	2.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
106-46-7	1,4-Dichlorobenzene	0.44	J, Q-2	ug/m3	2.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
622-96-8	4-Ethyltoluene	4.5	U	ug/m3	4.5	6/29/13 17:13	6/30/13 8:34	EPA TO-15
67-64-1	Acetone	3.1		ug/m3	1.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
107-13-1	Acrylonitrile	0.90	U	ug/m3	0.90	6/29/13 17:13	6/30/13 8:34	EPA TO-15
71-43-2	Benzene	0.27	J, Q-2	ug/m3	1.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-5	ug/m3	2.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-27-4	Bromodichloromethane	3.1	U	ug/m3	3.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-25-2	Bromoform	4.8	U	ug/m3	4.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: G5RSG0613****Lab ID: E132402-11****Station ID: G5R****Matrix: Soil Gas****Date Collected: 6/6/13 12:56**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-15-0	Carbon disulfide	5.6		ug/m3	1.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
56-23-5	Carbon Tetrachloride	0.36	J, Q-2	ug/m3	2.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-00-3	Chloroethane	0.92	J, Q-2, QC-2	ug/m3	1.2	6/29/13 17:13	6/30/13 8:34	EPA TO-15
67-66-3	Chloroform	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
74-87-3	Chloromethane	0.57	J, Q-2	ug/m3	0.90	6/29/13 17:13	6/30/13 8:34	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
110-82-7	Cyclohexane	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 8:34	EPA TO-15
124-48-1	Dibromochloromethane	3.9	U	ug/m3	3.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	3.2		ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
100-41-4	Ethyl Benzene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
142-82-5	Heptane	1.9	U	ug/m3	1.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
87-68-3	Hexachlorobutadiene	4.7	U, J, QC-5	ug/m3	4.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
110-54-3	Hexane	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 8:34	EPA TO-15
26635-64-3	Isooctane	0.17	J, Q-2	ug/m3	2.2	6/29/13 17:13	6/30/13 8:34	EPA TO-15
67-63-0	Isopropanol	1.1	U, J, QC-1, QC-5	ug/m3	1.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
591-78-6	Methyl Butyl Ketone	1.9	U	ug/m3	1.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
78-93-3	Methyl Ethyl Ketone	0.97	J, Q-2	ug/m3	1.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.9	U	ug/m3	1.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	6/29/13 17:13	6/30/13 8:34	EPA TO-15
95-47-6	o-Xylene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
100-42-5	Styrene	1.9	U	ug/m3	1.9	6/29/13 17:13	6/30/13 8:34	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	1.2	J, Q-2	ug/m3	3.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** G5RSG0613**Lab ID:** E132402-11**Station ID:** G5R**Matrix:** Soil Gas**Date Collected:** 6/6/13 12:56

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
108-88-3	Toluene	0.36	J, Q-2	ug/m3	1.7	6/29/13 17:13	6/30/13 8:34	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 8:34	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 8:34	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.4	U	ug/m3	2.4	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.6	J, Q-2	ug/m3	2.5	6/29/13 17:13	6/30/13 8:34	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 8:34	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 8:34	EPA TO-15
75-01-4	Vinyl chloride	1.7		ug/m3	1.2	6/29/13 17:13	6/30/13 8:34	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW1SG0613****Lab ID: E132402-12****Station ID: GMW1****Matrix: Soil Gas****Date Collected: 6/5/13 11:55**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	40	U	ug/m3	40	7/01/13 15:44	7/02/13 19:02	EPA TO-15
71-55-6	1,1,1-Trichloroethane	1.7	J, Q-2	ug/m3	25	7/01/13 15:44	7/02/13 19:02	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 19:02	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	34	U	ug/m3	34	7/01/13 15:44	7/02/13 19:02	EPA TO-15
79-00-5	1,1,2-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-34-3	1,1-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	17	U	ug/m3	17	7/01/13 15:44	7/02/13 19:02	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	29	U, J, QC-3, QC-5	ug/m3	29	7/01/13 15:44	7/02/13 19:02	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 19:02	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	35	U	ug/m3	35	7/01/13 15:44	7/02/13 19:02	EPA TO-15
95-50-1	1,2-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 19:02	EPA TO-15
107-06-2	1,2-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 19:02	EPA TO-15
78-87-5	1,2-Dichloroproppane	21	U	ug/m3	21	7/01/13 15:44	7/02/13 19:02	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	68		ug/m3	30	7/01/13 15:44	7/02/13 19:02	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 19:02	EPA TO-15
106-99-0	1,3-Butadiene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 19:02	EPA TO-15
541-73-1	1,3-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 19:02	EPA TO-15
106-46-7	1,4-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 19:02	EPA TO-15
123-91-1	1,4-Dioxane	17	U, J, QC-5	ug/m3	17	7/01/13 15:44	7/02/13 19:02	EPA TO-15
107-05-1	3-Chloropropene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 19:02	EPA TO-15
622-96-8	4-Ethyltoluene	45	U	ug/m3	45	7/01/13 15:44	7/02/13 19:02	EPA TO-15
67-64-1	Acetone	11	U, Q-2	ug/m3	11	7/01/13 15:44	7/02/13 19:02	EPA TO-15
107-13-1	Acrylonitrile	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 19:02	EPA TO-15
71-43-2	Benzene	14	U	ug/m3	14	7/01/13 15:44	7/02/13 19:02	EPA TO-15
100-44-7	Benzyl chloride	24	U, J, QC-5	ug/m3	24	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-27-4	Bromodichloromethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-25-2	Bromoform	48	U	ug/m3	48	7/01/13 15:44	7/02/13 19:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW1SG0613****Lab ID: E132402-12****Station ID: GMW1****Matrix: Soil Gas****Date Collected: 6/5/13 11:55**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	17	U	ug/m3	17	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-15-0	Carbon disulfide	20		ug/m3	14	7/01/13 15:44	7/02/13 19:02	EPA TO-15
56-23-5	Carbon Tetrachloride	28	U	ug/m3	28	7/01/13 15:44	7/02/13 19:02	EPA TO-15
108-90-7	Chlorobenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-00-3	Chloroethane	12	U	ug/m3	12	7/01/13 15:44	7/02/13 19:02	EPA TO-15
67-66-3	Chloroform	9.5	J, Q-2	ug/m3	22	7/01/13 15:44	7/02/13 19:02	EPA TO-15
74-87-3	Chloromethane	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 19:02	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 19:02	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 19:02	EPA TO-15
110-82-7	Cyclohexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 19:02	EPA TO-15
124-48-1	Dibromochloromethane	40	U	ug/m3	40	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	11	J, Q-2	ug/m3	21	7/01/13 15:44	7/02/13 19:02	EPA TO-15
141-78-6	Ethyl Acetate	17	U	ug/m3	17	7/01/13 15:44	7/02/13 19:02	EPA TO-15
100-41-4	Ethyl Benzene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 19:02	EPA TO-15
142-82-5	Heptane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 19:02	EPA TO-15
87-68-3	Hexachlorobutadiene	47	U, J, QC-5	ug/m3	47	7/01/13 15:44	7/02/13 19:02	EPA TO-15
110-54-3	Hexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 19:02	EPA TO-15
26635-64-3	Isooctane	22	U	ug/m3	22	7/01/13 15:44	7/02/13 19:02	EPA TO-15
67-63-0	Isopropanol	16	J, QC-5	ug/m3	11	7/01/13 15:44	7/02/13 19:02	EPA TO-15
591-78-6	Methyl Butyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 19:02	EPA TO-15
78-93-3	Methyl Ethyl Ketone	14	U	ug/m3	14	7/01/13 15:44	7/02/13 19:02	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 19:02	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-09-2	Methylene Chloride	15	U	ug/m3	15	7/01/13 15:44	7/02/13 19:02	EPA TO-15
95-47-6	o-Xylene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 19:02	EPA TO-15
100-42-5	Styrene	19	U	ug/m3	19	7/01/13 15:44	7/02/13 19:02	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	560		ug/m3	31	7/01/13 15:44	7/02/13 19:02	EPA TO-15
109-99-9	Tetrahydrofuran	14	U	ug/m3	14	7/01/13 15:44	7/02/13 19:02	EPA TO-15
108-88-3	Toluene	17	U	ug/m3	17	7/01/13 15:44	7/02/13 19:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** GMW1SG0613**Lab ID:** E132402-12**Station ID:** GMW1**Matrix:** Soil Gas**Date Collected:** 6/5/13 11:55

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 19:02	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 19:02	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	25	U	ug/m3	25	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.5	J, Q-2	ug/m3	25	7/01/13 15:44	7/02/13 19:02	EPA TO-15
108-05-4	Vinyl acetate	16	U	ug/m3	16	7/01/13 15:44	7/02/13 19:02	EPA TO-15
593-60-2	Vinyl bromide	20	U	ug/m3	20	7/01/13 15:44	7/02/13 19:02	EPA TO-15
75-01-4	Vinyl chloride	12	U	ug/m3	12	7/01/13 15:44	7/02/13 19:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW2SG0613****Lab ID: E132402-13****Station ID: GMW2****Matrix: Soil Gas****Date Collected: 6/5/13 12:34**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	40	U	ug/m3	40	7/01/13 15:44	7/02/13 20:38	EPA TO-15
71-55-6	1,1,1-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 20:38	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 20:38	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	34	U	ug/m3	34	7/01/13 15:44	7/02/13 20:38	EPA TO-15
79-00-5	1,1,2-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-34-3	1,1-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	17	U	ug/m3	17	7/01/13 15:44	7/02/13 20:38	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	29	U, J, QC-3, QC-5	ug/m3	29	7/01/13 15:44	7/02/13 20:38	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 20:38	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	35	U	ug/m3	35	7/01/13 15:44	7/02/13 20:38	EPA TO-15
95-50-1	1,2-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 20:38	EPA TO-15
107-06-2	1,2-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 20:38	EPA TO-15
78-87-5	1,2-Dichloroproppane	21	U	ug/m3	21	7/01/13 15:44	7/02/13 20:38	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	8.7	J, Q-2	ug/m3	30	7/01/13 15:44	7/02/13 20:38	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 20:38	EPA TO-15
106-99-0	1,3-Butadiene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 20:38	EPA TO-15
541-73-1	1,3-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 20:38	EPA TO-15
106-46-7	1,4-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 20:38	EPA TO-15
123-91-1	1,4-Dioxane	17	U, J, QC-5	ug/m3	17	7/01/13 15:44	7/02/13 20:38	EPA TO-15
107-05-1	3-Chloropropene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 20:38	EPA TO-15
622-96-8	4-Ethyltoluene	45	U	ug/m3	45	7/01/13 15:44	7/02/13 20:38	EPA TO-15
67-64-1	Acetone	18		ug/m3	11	7/01/13 15:44	7/02/13 20:38	EPA TO-15
107-13-1	Acrylonitrile	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 20:38	EPA TO-15
71-43-2	Benzene	14	U	ug/m3	14	7/01/13 15:44	7/02/13 20:38	EPA TO-15
100-44-7	Benzyl chloride	24	U, J, QC-5	ug/m3	24	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-27-4	Bromodichloromethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-25-2	Bromoform	48	U	ug/m3	48	7/01/13 15:44	7/02/13 20:38	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW2SG0613****Lab ID: E132402-13****Station ID: GMW2****Matrix: Soil Gas****Date Collected: 6/5/13 12:34**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	17	U	ug/m3	17	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-15-0	Carbon disulfide	4.2	J, Q-2	ug/m3	14	7/01/13 15:44	7/02/13 20:38	EPA TO-15
56-23-5	Carbon Tetrachloride	28	U	ug/m3	28	7/01/13 15:44	7/02/13 20:38	EPA TO-15
108-90-7	Chlorobenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-00-3	Chloroethane	12	U	ug/m3	12	7/01/13 15:44	7/02/13 20:38	EPA TO-15
67-66-3	Chloroform	1.3	J, Q-2	ug/m3	22	7/01/13 15:44	7/02/13 20:38	EPA TO-15
74-87-3	Chloromethane	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 20:38	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 20:38	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 20:38	EPA TO-15
110-82-7	Cyclohexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 20:38	EPA TO-15
124-48-1	Dibromochloromethane	40	U	ug/m3	40	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	3.6	J, Q-2	ug/m3	21	7/01/13 15:44	7/02/13 20:38	EPA TO-15
141-78-6	Ethyl Acetate	17	U	ug/m3	17	7/01/13 15:44	7/02/13 20:38	EPA TO-15
100-41-4	Ethyl Benzene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 20:38	EPA TO-15
142-82-5	Heptane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 20:38	EPA TO-15
87-68-3	Hexachlorobutadiene	47	U, J, QC-5	ug/m3	47	7/01/13 15:44	7/02/13 20:38	EPA TO-15
110-54-3	Hexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 20:38	EPA TO-15
26635-64-3	Isooctane	22	U	ug/m3	22	7/01/13 15:44	7/02/13 20:38	EPA TO-15
67-63-0	Isopropanol	11	U, J, QC-5	ug/m3	11	7/01/13 15:44	7/02/13 20:38	EPA TO-15
591-78-6	Methyl Butyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 20:38	EPA TO-15
78-93-3	Methyl Ethyl Ketone	14	U	ug/m3	14	7/01/13 15:44	7/02/13 20:38	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 20:38	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-09-2	Methylene Chloride	15	U	ug/m3	15	7/01/13 15:44	7/02/13 20:38	EPA TO-15
95-47-6	o-Xylene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 20:38	EPA TO-15
100-42-5	Styrene	19	U	ug/m3	19	7/01/13 15:44	7/02/13 20:38	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	210		ug/m3	30	7/01/13 15:44	7/02/13 20:38	EPA TO-15
109-99-9	Tetrahydrofuran	14	U	ug/m3	14	7/01/13 15:44	7/02/13 20:38	EPA TO-15
108-88-3	Toluene	21		ug/m3	17	7/01/13 15:44	7/02/13 20:38	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** GMW2SG0613**Lab ID:** E132402-13**Station ID:** GMW2**Matrix:** Soil Gas**Date Collected:** 6/5/13 12:34

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 20:38	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 20:38	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	25	U	ug/m3	25	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.7	J, Q-2	ug/m3	25	7/01/13 15:44	7/02/13 20:38	EPA TO-15
108-05-4	Vinyl acetate	16	U	ug/m3	16	7/01/13 15:44	7/02/13 20:38	EPA TO-15
593-60-2	Vinyl bromide	20	U	ug/m3	20	7/01/13 15:44	7/02/13 20:38	EPA TO-15
75-01-4	Vinyl chloride	12	U	ug/m3	12	7/01/13 15:44	7/02/13 20:38	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW2SSG0613****Lab ID: E132402-14****Station ID: GMW2****Matrix: Soil Gas****Date Collected: 6/5/13 12:34**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
R4-7156	(m- and/or p-)Xylene	40	U	ug/m3	40	7/01/13 15:44	7/02/13 21:26	EPA TO-15
71-55-6	1,1,1-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 21:26	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 21:26	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	34	U	ug/m3	34	7/01/13 15:44	7/02/13 21:26	EPA TO-15
79-00-5	1,1,2-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-34-3	1,1-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	17	U	ug/m3	17	7/01/13 15:44	7/02/13 21:26	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	29	U, J, QC-3, QC-5	ug/m3	29	7/01/13 15:44	7/02/13 21:26	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 21:26	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	35	U	ug/m3	35	7/01/13 15:44	7/02/13 21:26	EPA TO-15
95-50-1	1,2-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 21:26	EPA TO-15
107-06-2	1,2-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 21:26	EPA TO-15
78-87-5	1,2-Dichloroproppane	21	U	ug/m3	21	7/01/13 15:44	7/02/13 21:26	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	8.7	J, Q-2	ug/m3	30	7/01/13 15:44	7/02/13 21:26	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 21:26	EPA TO-15
106-99-0	1,3-Butadiene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 21:26	EPA TO-15
541-73-1	1,3-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 21:26	EPA TO-15
106-46-7	1,4-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 21:26	EPA TO-15
123-91-1	1,4-Dioxane	17	U, J, QC-5	ug/m3	17	7/01/13 15:44	7/02/13 21:26	EPA TO-15
107-05-1	3-Chloropropene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 21:26	EPA TO-15
622-96-8	4-Ethyltoluene	45	U	ug/m3	45	7/01/13 15:44	7/02/13 21:26	EPA TO-15
67-64-1	Acetone	13		ug/m3	11	7/01/13 15:44	7/02/13 21:26	EPA TO-15
107-13-1	Acrylonitrile	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 21:26	EPA TO-15
71-43-2	Benzene	14	U	ug/m3	14	7/01/13 15:44	7/02/13 21:26	EPA TO-15
100-44-7	Benzyl chloride	24	U, J, QC-5	ug/m3	24	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-27-4	Bromodichloromethane	31	U	ug/m3	31	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-25-2	Bromoform	48	U	ug/m3	48	7/01/13 15:44	7/02/13 21:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW2SSG0613****Lab ID: E132402-14****Station ID: GMW2****Matrix: Soil Gas****Date Collected: 6/5/13 12:34**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	17	U	ug/m3	17	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-15-0	Carbon disulfide	2.7	J, Q-2	ug/m3	14	7/01/13 15:44	7/02/13 21:26	EPA TO-15
56-23-5	Carbon Tetrachloride	28	U	ug/m3	28	7/01/13 15:44	7/02/13 21:26	EPA TO-15
108-90-7	Chlorobenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-00-3	Chloroethane	12	U	ug/m3	12	7/01/13 15:44	7/02/13 21:26	EPA TO-15
67-66-3	Chloroform	1.5	J, Q-2	ug/m3	22	7/01/13 15:44	7/02/13 21:26	EPA TO-15
74-87-3	Chloromethane	9.1	U	ug/m3	9.1	7/01/13 15:44	7/02/13 21:26	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 21:26	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 21:26	EPA TO-15
110-82-7	Cyclohexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 21:26	EPA TO-15
124-48-1	Dibromochloromethane	40	U	ug/m3	40	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	3.0	J, Q-2	ug/m3	21	7/01/13 15:44	7/02/13 21:26	EPA TO-15
141-78-6	Ethyl Acetate	17	U	ug/m3	17	7/01/13 15:44	7/02/13 21:26	EPA TO-15
100-41-4	Ethyl Benzene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 21:26	EPA TO-15
142-82-5	Heptane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 21:26	EPA TO-15
87-68-3	Hexachlorobutadiene	47	U, J, QC-5	ug/m3	47	7/01/13 15:44	7/02/13 21:26	EPA TO-15
110-54-3	Hexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 21:26	EPA TO-15
26635-64-3	Isooctane	22	U	ug/m3	22	7/01/13 15:44	7/02/13 21:26	EPA TO-15
67-63-0	Isopropanol	11	U, J, QC-5	ug/m3	11	7/01/13 15:44	7/02/13 21:26	EPA TO-15
591-78-6	Methyl Butyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 21:26	EPA TO-15
78-93-3	Methyl Ethyl Ketone	14	U	ug/m3	14	7/01/13 15:44	7/02/13 21:26	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 21:26	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-09-2	Methylene Chloride	15	U	ug/m3	15	7/01/13 15:44	7/02/13 21:26	EPA TO-15
95-47-6	o-Xylene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 21:26	EPA TO-15
100-42-5	Styrene	19	U	ug/m3	19	7/01/13 15:44	7/02/13 21:26	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	210		ug/m3	30	7/01/13 15:44	7/02/13 21:26	EPA TO-15
109-99-9	Tetrahydrofuran	14	U	ug/m3	14	7/01/13 15:44	7/02/13 21:26	EPA TO-15
108-88-3	Toluene	20		ug/m3	17	7/01/13 15:44	7/02/13 21:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** GMW2SSG0613**Lab ID:** E132402-14**Station ID:** GMW2**Matrix:** Soil Gas**Date Collected:** 6/5/13 12:34

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 21:26	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 21:26	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	25	U	ug/m3	25	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.9	J, Q-2	ug/m3	25	7/01/13 15:44	7/02/13 21:26	EPA TO-15
108-05-4	Vinyl acetate	16	U	ug/m3	16	7/01/13 15:44	7/02/13 21:26	EPA TO-15
593-60-2	Vinyl bromide	20	U	ug/m3	20	7/01/13 15:44	7/02/13 21:26	EPA TO-15
75-01-4	Vinyl chloride	12	U	ug/m3	12	7/01/13 15:44	7/02/13 21:26	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** GMW3SG0613**Lab ID:** E132402-15**Station ID:** GMW3**Matrix:** Soil Gas**Date Collected:** 6/5/13 14:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	40	U	ug/m3	40	7/01/13 15:44	7/02/13 22:14	EPA TO-15
71-55-6	1,1,1-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 22:14	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	32	U	ug/m3	32	7/01/13 15:44	7/02/13 22:14	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	34	U	ug/m3	34	7/01/13 15:44	7/02/13 22:14	EPA TO-15
79-00-5	1,1,2-Trichloroethane	25	U	ug/m3	25	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-34-3	1,1-Dichloroethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	30	U, J, QC-3, QC-5	ug/m3	30	7/01/13 15:44	7/02/13 22:14	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 22:14	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	35	U	ug/m3	35	7/01/13 15:44	7/02/13 22:14	EPA TO-15
95-50-1	1,2-Dichlorobenzene	27	U	ug/m3	27	7/01/13 15:44	7/02/13 22:14	EPA TO-15
107-06-2	1,2-Dichloroethane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 22:14	EPA TO-15
78-87-5	1,2-Dichloroproppane	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	440		ug/m3	30	7/01/13 15:44	7/02/13 22:14	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	22	U	ug/m3	22	7/01/13 15:44	7/02/13 22:14	EPA TO-15
106-99-0	1,3-Butadiene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
541-73-1	1,3-Dichlorobenzene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 22:14	EPA TO-15
106-46-7	1,4-Dichlorobenzene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 22:14	EPA TO-15
123-91-1	1,4-Dioxane	17	U, J, QC-5	ug/m3	17	7/01/13 15:44	7/02/13 22:14	EPA TO-15
107-05-1	3-Chloropropene	28	U	ug/m3	28	7/01/13 15:44	7/02/13 22:14	EPA TO-15
622-96-8	4-Ethyltoluene	46	U	ug/m3	46	7/01/13 15:44	7/02/13 22:14	EPA TO-15
67-64-1	Acetone	15		ug/m3	11	7/01/13 15:44	7/02/13 22:14	EPA TO-15
107-13-1	Acrylonitrile	9.2	U	ug/m3	9.2	7/01/13 15:44	7/02/13 22:14	EPA TO-15
71-43-2	Benzene	15	U	ug/m3	15	7/01/13 15:44	7/02/13 22:14	EPA TO-15
100-44-7	Benzyl chloride	24	U, J, QC-5	ug/m3	24	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-27-4	Bromodichloromethane	32	U	ug/m3	32	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-25-2	Bromoform	49	U	ug/m3	49	7/01/13 15:44	7/02/13 22:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: GMW3SG0613****Lab ID: E132402-15****Station ID: GMW3****Matrix: Soil Gas****Date Collected: 6/5/13 14:50**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-15-0	Carbon disulfide	0.86	J, Q-2	ug/m3	15	7/01/13 15:44	7/02/13 22:14	EPA TO-15
56-23-5	Carbon Tetrachloride	28	U	ug/m3	28	7/01/13 15:44	7/02/13 22:14	EPA TO-15
108-90-7	Chlorobenzene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-00-3	Chloroethane	12	U	ug/m3	12	7/01/13 15:44	7/02/13 22:14	EPA TO-15
67-66-3	Chloroform	3.9	J, Q-2	ug/m3	22	7/01/13 15:44	7/02/13 22:14	EPA TO-15
74-87-3	Chloromethane	9.2	U	ug/m3	9.2	7/01/13 15:44	7/02/13 22:14	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
110-82-7	Cyclohexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 22:14	EPA TO-15
124-48-1	Dibromochloromethane	40	U	ug/m3	40	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	8.6	J, Q-2	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
141-78-6	Ethyl Acetate	17	U	ug/m3	17	7/01/13 15:44	7/02/13 22:14	EPA TO-15
100-41-4	Ethyl Benzene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 22:14	EPA TO-15
142-82-5	Heptane	19	U	ug/m3	19	7/01/13 15:44	7/02/13 22:14	EPA TO-15
87-68-3	Hexachlorobutadiene	48	U, J, QC-5	ug/m3	48	7/01/13 15:44	7/02/13 22:14	EPA TO-15
110-54-3	Hexane	16	U	ug/m3	16	7/01/13 15:44	7/02/13 22:14	EPA TO-15
26635-64-3	Isooctane	22	U	ug/m3	22	7/01/13 15:44	7/02/13 22:14	EPA TO-15
67-63-0	Isopropanol	12	U, J, QC-5	ug/m3	12	7/01/13 15:44	7/02/13 22:14	EPA TO-15
591-78-6	Methyl Butyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 22:14	EPA TO-15
78-93-3	Methyl Ethyl Ketone	14	U	ug/m3	14	7/01/13 15:44	7/02/13 22:14	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	19	U	ug/m3	19	7/01/13 15:44	7/02/13 22:14	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-09-2	Methylene Chloride	16	U	ug/m3	16	7/01/13 15:44	7/02/13 22:14	EPA TO-15
95-47-6	o-Xylene	20	U	ug/m3	20	7/01/13 15:44	7/02/13 22:14	EPA TO-15
100-42-5	Styrene	19	U	ug/m3	19	7/01/13 15:44	7/02/13 22:14	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	220		ug/m3	31	7/01/13 15:44	7/02/13 22:14	EPA TO-15
109-99-9	Tetrahydrofuran	14	U	ug/m3	14	7/01/13 15:44	7/02/13 22:14	EPA TO-15
108-88-3	Toluene	17	U	ug/m3	17	7/01/13 15:44	7/02/13 22:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** GMW3SG0613**Lab ID:** E132402-15**Station ID:** GMW3**Matrix:** Soil Gas**Date Collected:** 6/5/13 14:50

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	18	U	ug/m3	18	7/01/13 15:44	7/02/13 22:14	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	4.1	J, Q-2	ug/m3	25	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	25	U	ug/m3	25	7/01/13 15:44	7/02/13 22:14	EPA TO-15
108-05-4	Vinyl acetate	16	U	ug/m3	16	7/01/13 15:44	7/02/13 22:14	EPA TO-15
593-60-2	Vinyl bromide	21	U	ug/m3	21	7/01/13 15:44	7/02/13 22:14	EPA TO-15
75-01-4	Vinyl chloride	12	U	ug/m3	12	7/01/13 15:44	7/02/13 22:14	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL1SG0613****Lab ID: E132402-16****Station ID: LLL1****Matrix: Soil Gas****Date Collected: 6/4/13 13:20**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	14	J, Q-2	ug/m3	98	7/03/13 10:48	7/04/13 4:41	EPA TO-15
71-55-6	1,1,1-Trichloroethane	100		ug/m3	61	7/03/13 10:48	7/04/13 4:41	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	77	U	ug/m3	77	7/03/13 10:48	7/04/13 4:41	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	84	U	ug/m3	84	7/03/13 10:48	7/04/13 4:41	EPA TO-15
79-00-5	1,1,2-Trichloroethane	61	U	ug/m3	61	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-34-3	1,1-Dichloroethane	45	U	ug/m3	45	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	43	U	ug/m3	43	7/03/13 10:48	7/04/13 4:41	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	73	U, J, QC-5, QC-1, QC-3	ug/m3	73	7/03/13 10:48	7/04/13 4:41	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	3.7	J, Q-2	ug/m3	54	7/03/13 10:48	7/04/13 4:41	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	86	U	ug/m3	86	7/03/13 10:48	7/04/13 4:41	EPA TO-15
95-50-1	1,2-Dichlorobenzene	66	U	ug/m3	66	7/03/13 10:48	7/04/13 4:41	EPA TO-15
107-06-2	1,2-Dichloroethane	45	U	ug/m3	45	7/03/13 10:48	7/04/13 4:41	EPA TO-15
78-87-5	1,2-Dichloroproppane	52	U	ug/m3	52	7/03/13 10:48	7/04/13 4:41	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	190		ug/m3	73	7/03/13 10:48	7/04/13 4:41	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	53	U	ug/m3	53	7/03/13 10:48	7/04/13 4:41	EPA TO-15
106-99-0	1,3-Butadiene	50	U	ug/m3	50	7/03/13 10:48	7/04/13 4:41	EPA TO-15
541-73-1	1,3-Dichlorobenzene	67	U	ug/m3	67	7/03/13 10:48	7/04/13 4:41	EPA TO-15
106-46-7	1,4-Dichlorobenzene	67	U	ug/m3	67	7/03/13 10:48	7/04/13 4:41	EPA TO-15
123-91-1	1,4-Dioxane	41	U, J, QC-5	ug/m3	41	7/03/13 10:48	7/04/13 4:41	EPA TO-15
107-05-1	3-Chloropropene	70	U	ug/m3	70	7/03/13 10:48	7/04/13 4:41	EPA TO-15
622-96-8	4-Ethyltoluene	110	U	ug/m3	110	7/03/13 10:48	7/04/13 4:41	EPA TO-15
67-64-1	Acetone	120		ug/m3	27	7/03/13 10:48	7/04/13 4:41	EPA TO-15
107-13-1	Acrylonitrile	22	U	ug/m3	22	7/03/13 10:48	7/04/13 4:41	EPA TO-15
71-43-2	Benzene	11	J, Q-2	ug/m3	36	7/03/13 10:48	7/04/13 4:41	EPA TO-15
100-44-7	Benzyl chloride	60	U, J, QC-1, QC-5	ug/m3	60	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-27-4	Bromodichloromethane	77	U	ug/m3	77	7/03/13 10:48	7/04/13 4:41	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL1SG0613****Lab ID: E132402-16****Station ID: LLL1****Matrix: Soil Gas****Date Collected: 6/4/13 13:20**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
75-25-2	Bromoform	120	U	ug/m3	120	7/03/13 10:48	7/04/13 4:41	EPA TO-15
74-83-9	Bromomethane	43	U	ug/m3	43	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-15-0	Carbon disulfide	1.6	J, Q-2	ug/m3	36	7/03/13 10:48	7/04/13 4:41	EPA TO-15
56-23-5	Carbon Tetrachloride	2700	J, QC-4	ug/m3	69	7/03/13 10:48	7/04/13 4:41	EPA TO-15
108-90-7	Chlorobenzene	52	U	ug/m3	52	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-00-3	Chloroethane	29	U	ug/m3	29	7/03/13 10:48	7/04/13 4:41	EPA TO-15
67-66-3	Chloroform	160		ug/m3	53	7/03/13 10:48	7/04/13 4:41	EPA TO-15
74-87-3	Chloromethane	22	U	ug/m3	22	7/03/13 10:48	7/04/13 4:41	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	44	U	ug/m3	44	7/03/13 10:48	7/04/13 4:41	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	50	U	ug/m3	50	7/03/13 10:48	7/04/13 4:41	EPA TO-15
110-82-7	Cyclohexane	13	J, Q-2	ug/m3	40	7/03/13 10:48	7/04/13 4:41	EPA TO-15
124-48-1	Dibromochloromethane	98	U	ug/m3	98	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	48	J, Q-2	ug/m3	52	7/03/13 10:48	7/04/13 4:41	EPA TO-15
141-78-6	Ethyl Acetate	41	U	ug/m3	41	7/03/13 10:48	7/04/13 4:41	EPA TO-15
100-41-4	Ethyl Benzene	6.8	J, Q-2	ug/m3	49	7/03/13 10:48	7/04/13 4:41	EPA TO-15
142-82-5	Heptane	28	J, Q-2	ug/m3	47	7/03/13 10:48	7/04/13 4:41	EPA TO-15
87-68-3	Hexachlorobutadiene	120	U, J, QC-1, QC-5	ug/m3	120	7/03/13 10:48	7/04/13 4:41	EPA TO-15
110-54-3	Hexane	35	J, Q-2	ug/m3	40	7/03/13 10:48	7/04/13 4:41	EPA TO-15
26635-64-3	Isooctane	54	U	ug/m3	54	7/03/13 10:48	7/04/13 4:41	EPA TO-15
67-63-0	Isopropanol	28	U, J, QC-1, QC-5	ug/m3	28	7/03/13 10:48	7/04/13 4:41	EPA TO-15
591-78-6	Methyl Butyl Ketone	47	U	ug/m3	47	7/03/13 10:48	7/04/13 4:41	EPA TO-15
78-93-3	Methyl Ethyl Ketone	24	J, Q-2	ug/m3	34	7/03/13 10:48	7/04/13 4:41	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	47	U	ug/m3	47	7/03/13 10:48	7/04/13 4:41	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	43	U	ug/m3	43	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-09-2	Methylene Chloride	38	U	ug/m3	38	7/03/13 10:48	7/04/13 4:41	EPA TO-15
95-47-6	o-Xylene	4.2	J, Q-2	ug/m3	49	7/03/13 10:48	7/04/13 4:41	EPA TO-15
100-42-5	Styrene	47	U	ug/m3	47	7/03/13 10:48	7/04/13 4:41	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	120		ug/m3	75	7/03/13 10:48	7/04/13 4:41	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** LLL1SG0613**Lab ID:** E132402-16**Station ID:** LLL1**Matrix:** Soil Gas**Date Collected:** 6/4/13 13:20

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
109-99-9	Tetrahydrofuran	34	U	ug/m3	34	7/03/13 10:48	7/04/13 4:41	EPA TO-15
108-88-3	Toluene	19	J, Q-2	ug/m3	42	7/03/13 10:48	7/04/13 4:41	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	44	U	ug/m3	44	7/03/13 10:48	7/04/13 4:41	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	52	U	ug/m3	52	7/03/13 10:48	7/04/13 4:41	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	61	U	ug/m3	61	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	62	U	ug/m3	62	7/03/13 10:48	7/04/13 4:41	EPA TO-15
108-05-4	Vinyl acetate	40	U	ug/m3	40	7/03/13 10:48	7/04/13 4:41	EPA TO-15
593-60-2	Vinyl bromide	50	U	ug/m3	50	7/03/13 10:48	7/04/13 4:41	EPA TO-15
75-01-4	Vinyl chloride	29	U	ug/m3	29	7/03/13 10:48	7/04/13 4:41	EPA TO-15



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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL2SG0613****Lab ID: E132402-17****Station ID: LLL2****Matrix: Soil Gas****Date Collected: 6/4/13 14:44**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	5.0		ug/m3	4.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
71-55-6	1,1,1-Trichloroethane	30		ug/m3	2.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	ug/m3	3.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	3.4	U	ug/m3	3.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	2.9	U, J, QC-3, QC-5	ug/m3	2.9	6/29/13 17:13	6/30/13 1:02	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	1.3	J, Q-2	ug/m3	2.2	6/29/13 17:13	6/30/13 1:02	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.5	U	ug/m3	3.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	6.6		ug/m3	3.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	0.44	J, Q-2	ug/m3	2.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
106-99-0	1,3-Butadiene	17		ug/m3	2.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
622-96-8	4-Ethyltoluene	0.46	J, Q-2	ug/m3	4.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
67-64-1	Acetone	86		ug/m3	22	6/26/13 10:42	6/26/13 23:37	EPA TO-15
107-13-1	Acrylonitrile	0.91	U	ug/m3	0.91	6/29/13 17:13	6/30/13 1:02	EPA TO-15
71-43-2	Benzene	9.2		ug/m3	1.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-5	ug/m3	2.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-27-4	Bromodichloromethane	3.1	U	ug/m3	3.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-25-2	Bromoform	4.8	U	ug/m3	4.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL2SG0613****Lab ID: E132402-17****Station ID: LLL2****Matrix: Soil Gas****Date Collected: 6/4/13 14:44**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-15-0	Carbon disulfide	7.8		ug/m3	1.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
56-23-5	Carbon Tetrachloride	0.25	J, Q-2	ug/m3	2.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	6/29/13 17:13	6/30/13 1:02	EPA TO-15
67-66-3	Chloroform	2.2	U	ug/m3	2.2	6/29/13 17:13	6/30/13 1:02	EPA TO-15
74-87-3	Chloromethane	0.91	U	ug/m3	0.91	6/29/13 17:13	6/30/13 1:02	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
110-82-7	Cyclohexane	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 1:02	EPA TO-15
124-48-1	Dibromochloromethane	4.0	U	ug/m3	4.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	7.0		ug/m3	2.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
100-41-4	Ethyl Benzene	3.0		ug/m3	2.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
142-82-5	Heptane	16		ug/m3	1.9	6/29/13 17:13	6/30/13 1:02	EPA TO-15
87-68-3	Hexachlorobutadiene	4.7	U, J, QC-5	ug/m3	4.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15
110-54-3	Hexane	25		ug/m3	1.6	6/29/13 17:13	6/30/13 1:02	EPA TO-15
26635-64-3	Isooctane	2.2	U	ug/m3	2.2	6/29/13 17:13	6/30/13 1:02	EPA TO-15
67-63-0	Isopropanol	4.1	J, QC-1, QC-5	ug/m3	1.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
591-78-6	Methyl Butyl Ketone	3.3	U, D-4	ug/m3	3.3	6/29/13 17:13	6/30/13 1:02	EPA TO-15
78-93-3	Methyl Ethyl Ketone	20		ug/m3	1.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	0.57	J, Q-2	ug/m3	1.9	6/29/13 17:13	6/30/13 1:02	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
95-47-6	o-Xylene	2.2		ug/m3	2.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
100-42-5	Styrene	1.7	J, Q-2	ug/m3	1.9	6/29/13 17:13	6/30/13 1:02	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	7.1		ug/m3	3.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	6/29/13 17:13	6/30/13 1:02	EPA TO-15
108-88-3	Toluene	14		ug/m3	1.7	6/29/13 17:13	6/30/13 1:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** LLL2SG0613**Lab ID:** E132402-17**Station ID:** LLL2**Matrix:** Soil Gas**Date Collected:** 6/4/13 14:44

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:02	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 1:02	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.5	U	ug/m3	2.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	2.6		ug/m3	2.5	6/29/13 17:13	6/30/13 1:02	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 1:02	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 1:02	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	6/29/13 17:13	6/30/13 1:02	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL3SG0613****Lab ID: E132402-18****Station ID: LLL3****Matrix: Soil Gas****Date Collected: 6/4/13 16:04**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.1	J, QI-1	ug/m3	3.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
71-55-6	1,1,1-Trichloroethane	3.8		ug/m3	2.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.0	U, J, QI-1	ug/m3	3.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.89	J, Q-2	ug/m3	3.3	6/29/13 17:13	6/30/13 1:52	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.4	U	ug/m3	2.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	2.9	U, J, QC-3, QC-5, QI-1	ug/m3	2.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	2.2	J, QI-1	ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.4	U	ug/m3	3.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.6	U, J, QI-1	ug/m3	2.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:52	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	0.31	J, Q-2	ug/m3	2.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	0.60	J, Q-2, QI-1	ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
106-99-0	1,3-Butadiene	12		ug/m3	2.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.7	U, J, QI-1	ug/m3	2.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.7	U, J, QI-1	ug/m3	2.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
123-91-1	1,4-Dioxane	1.6	U, J, QC-5	ug/m3	1.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	6/29/13 17:13	6/30/13 1:52	EPA TO-15
622-96-8	4-Ethyltoluene	1.6	J, Q-2, QI-1	ug/m3	4.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
67-64-1	Acetone	200	J, QC-4	ug/m3	5.4	6/29/13 17:13	6/30/13 2:40	EPA TO-15
107-13-1	Acrylonitrile	0.89	U	ug/m3	0.89	6/29/13 17:13	6/30/13 1:52	EPA TO-15
71-43-2	Benzene	7.6		ug/m3	1.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-5, QI-1	ug/m3	2.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-27-4	Bromodichloromethane	3.0	U	ug/m3	3.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL3SG0613****Lab ID: E132402-18****Station ID: LLL3****Matrix: Soil Gas****Date Collected: 6/4/13 16:04**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-25-2	Bromoform	4.7	U, J, QI-1	ug/m3	4.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-15-0	Carbon disulfide	3.5		ug/m3	1.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
56-23-5	Carbon Tetrachloride	0.81	J, Q-2	ug/m3	2.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
108-90-7	Chlorobenzene	2.0	U, J, QI-1	ug/m3	2.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	6/29/13 17:13	6/30/13 1:52	EPA TO-15
67-66-3	Chloroform	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
74-87-3	Chloromethane	0.77	J, Q-2	ug/m3	0.89	6/29/13 17:13	6/30/13 1:52	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 1:52	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
110-82-7	Cyclohexane	7.3		ug/m3	1.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
124-48-1	Dibromochloromethane	3.9	U	ug/m3	3.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	8.9		ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
141-78-6	Ethyl Acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
100-41-4	Ethyl Benzene	2.4	J, QI-1	ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
142-82-5	Heptane	18		ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
87-68-3	Hexachlorobutadiene	4.6	U, J, QC-5, QI-1	ug/m3	4.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
110-54-3	Hexane	27		ug/m3	1.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
26635-64-3	Isooctane	0.77	J, Q-2	ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
67-63-0	Isopropanol	3.2	J, QC-1, QC-5	ug/m3	1.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.5		ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
78-93-3	Methyl Ethyl Ketone	67		ug/m3	6.7	6/29/13 17:13	6/30/13 2:40	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.6	J, Q-2	ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	6/29/13 17:13	6/30/13 1:52	EPA TO-15
95-47-6	o-Xylene	1.7	J, Q-2, QI-1	ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
100-42-5	Styrene	1.4	J, Q-2, QI-1	ug/m3	1.9	6/29/13 17:13	6/30/13 1:52	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	9.9		ug/m3	3.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** LLL3SG0613**Lab ID:** E132402-18**Station ID:** LLL3**Matrix:** Soil Gas**Date Collected:** 6/4/13 16:04

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
109-99-9	Tetrahydrofuran	1.3	U	ug/m3	1.3	6/29/13 17:13	6/30/13 1:52	EPA TO-15
108-88-3	Toluene	11		ug/m3	1.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 1:52	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.4	U	ug/m3	2.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.2	J, Q-2	ug/m3	2.4	6/29/13 17:13	6/30/13 1:52	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 1:52	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 1:52	EPA TO-15
75-01-4	Vinyl chloride	1.1	U	ug/m3	1.1	6/29/13 17:13	6/30/13 1:52	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL3SSG0613****Lab ID: E132402-19****Station ID: LLL3****Matrix: Soil Gas****Date Collected: 6/4/13 16:04**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	3.4	J, Q-2	ug/m3	3.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
71-55-6	1,1,1-Trichloroethane	2.9		ug/m3	2.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.1	U	ug/m3	3.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.61	J, Q-2	ug/m3	3.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.5	U	ug/m3	2.5	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	2.9	U, J, QC-1, QC-3, QC-5	ug/m3	2.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	1.9	J, Q-2	ug/m3	2.2	7/03/13 10:45	7/04/13 3:54	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.4	U	ug/m3	3.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.7	U	ug/m3	2.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	9.1		ug/m3	2.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	0.53	J, Q-2	ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
106-99-0	1,3-Butadiene	7.6		ug/m3	2.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.7	U	ug/m3	2.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.7	U	ug/m3	2.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
123-91-1	1,4-Dioxane	1.7	U, J, QC-5	ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
107-05-1	3-Chloropropene	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
622-96-8	4-Ethyltoluene	1.2	J, Q-2	ug/m3	4.5	7/03/13 10:45	7/04/13 3:54	EPA TO-15
67-64-1	Acetone	280		ug/m3	55	6/26/13 10:42	6/27/13 1:12	EPA TO-15
107-13-1	Acrylonitrile	0.90	U	ug/m3	0.90	7/03/13 10:45	7/04/13 3:54	EPA TO-15
71-43-2	Benzene	5.7		ug/m3	1.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-1, QC-5	ug/m3	2.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-27-4	Bromodichloromethane	3.1	U	ug/m3	3.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL3SSG0613****Lab ID: E132402-19****Station ID: LLL3****Matrix: Soil Gas****Date Collected: 6/4/13 16:04**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
75-25-2	Bromoform	4.8	U	ug/m3	4.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-15-0	Carbon disulfide	2.9		ug/m3	1.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
56-23-5	Carbon Tetrachloride	2.8	U	ug/m3	2.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
108-90-7	Chlorobenzene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 3:54	EPA TO-15
67-66-3	Chloroform	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
74-87-3	Chloromethane	0.90	U	ug/m3	0.90	7/03/13 10:45	7/04/13 3:54	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15
110-82-7	Cyclohexane	5.9		ug/m3	1.6	7/03/13 10:45	7/04/13 3:54	EPA TO-15
124-48-1	Dibromochloromethane	3.9	U	ug/m3	3.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	6.4		ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
141-78-6	Ethyl Acetate	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
100-41-4	Ethyl Benzene	1.9	J, Q-2	ug/m3	2.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15
142-82-5	Heptane	17		ug/m3	1.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
87-68-3	Hexachlorobutadiene	4.7	U, J, QC-1, QC-5	ug/m3	4.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
110-54-3	Hexane	18		ug/m3	1.6	7/03/13 10:45	7/04/13 3:54	EPA TO-15
26635-64-3	Isooctane	2.2	U	ug/m3	2.2	7/03/13 10:45	7/04/13 3:54	EPA TO-15
67-63-0	Isopropanol	2.8	J, QC-1, QC-5	ug/m3	1.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
591-78-6	Methyl Butyl Ketone	2.6		ug/m3	1.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
78-93-3	Methyl Ethyl Ketone	46	J, QC-4	ug/m3	1.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	2.1		ug/m3	1.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.7	U	ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	7/03/13 10:45	7/04/13 3:54	EPA TO-15
95-47-6	o-Xylene	1.3	J, Q-2	ug/m3	2.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15
100-42-5	Styrene	1.2	J, Q-2	ug/m3	1.9	7/03/13 10:45	7/04/13 3:54	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	8.8		ug/m3	3.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL3SSG0613****Lab ID: E132402-19****Station ID: LLL3****Matrix: Soil Gas****Date Collected: 6/4/13 16:04**

<b>CAS Number</b>	<b>Analyte</b>	<b>Results</b>	<b>Qualifiers</b>	<b>Units</b>	<b>MRL</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Method</b>
109-99-9	Tetrahydrofuran	1.4	U	ug/m3	1.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
108-88-3	Toluene	9.2		ug/m3	1.7	7/03/13 10:45	7/04/13 3:54	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	1.8	U	ug/m3	1.8	7/03/13 10:45	7/04/13 3:54	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	7/03/13 10:45	7/04/13 3:54	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.4	U	ug/m3	2.4	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.7	J, Q-2	ug/m3	2.5	7/03/13 10:45	7/04/13 3:54	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	7/03/13 10:45	7/04/13 3:54	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	7/03/13 10:45	7/04/13 3:54	EPA TO-15
75-01-4	Vinyl chloride	1.2	U	ug/m3	1.2	7/03/13 10:45	7/04/13 3:54	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL4SG0613****Lab ID: E132402-20****Station ID: LLL4****Matrix: Soil Gas****Date Collected: 6/4/13 16:44**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	4.9		ug/m3	3.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
71-55-6	1,1,1-Trichloroethane	6.3		ug/m3	2.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	3.0	U	ug/m3	3.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	3.3	U	ug/m3	3.3	6/29/13 17:13	6/30/13 5:15	EPA TO-15
79-00-5	1,1,2-Trichloroethane	2.4	U	ug/m3	2.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-34-3	1,1-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	2.9	U, J, QC-3, QC-5	ug/m3	2.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	1.7	J, Q-2	ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	3.4	U	ug/m3	3.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
95-50-1	1,2-Dichlorobenzene	2.6	U	ug/m3	2.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
107-06-2	1,2-Dichloroethane	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 5:15	EPA TO-15
78-87-5	1,2-Dichloroproppane	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	8.6		ug/m3	2.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	0.68	J, Q-2	ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
106-99-0	1,3-Butadiene	20		ug/m3	2.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
541-73-1	1,3-Dichlorobenzene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
106-46-7	1,4-Dichlorobenzene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
123-91-1	1,4-Dioxane	1.6	U, J, QC-5	ug/m3	1.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
107-05-1	3-Chloropropene	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
622-96-8	4-Ethyltoluene	1.8	J, Q-2	ug/m3	4.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
67-64-1	Acetone	140		ug/m3	21	6/26/13 10:42	6/27/13 2:00	EPA TO-15
107-13-1	Acrylonitrile	0.89	U	ug/m3	0.89	6/29/13 17:13	6/30/13 5:15	EPA TO-15
71-43-2	Benzene	12		ug/m3	1.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
100-44-7	Benzyl chloride	2.4	U, J, QC-5	ug/m3	2.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-27-4	Bromodichloromethane	3.0	U	ug/m3	3.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-25-2	Bromoform	4.7	U	ug/m3	4.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL4SG0613****Lab ID: E132402-20****Station ID: LLL4****Matrix: Soil Gas****Date Collected: 6/4/13 16:44**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
74-83-9	Bromomethane	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-15-0	Carbon disulfide	7.2		ug/m3	1.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
56-23-5	Carbon Tetrachloride	2.7	U	ug/m3	2.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
108-90-7	Chlorobenzene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-00-3	Chloroethane	1.2	U	ug/m3	1.2	6/29/13 17:13	6/30/13 5:15	EPA TO-15
67-66-3	Chloroform	3.1		ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
74-87-3	Chloromethane	0.89	U	ug/m3	0.89	6/29/13 17:13	6/30/13 5:15	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	1.8	U	ug/m3	1.8	6/29/13 17:13	6/30/13 5:15	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
110-82-7	Cyclohexane	7.4		ug/m3	1.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
124-48-1	Dibromochloromethane	3.9	U	ug/m3	3.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	5.1		ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
141-78-6	Ethyl Acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
100-41-4	Ethyl Benzene	3.0		ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
142-82-5	Heptane	20		ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
87-68-3	Hexachlorobutadiene	4.6	J, QC-5	ug/m3	4.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
110-54-3	Hexane	8.5		ug/m3	1.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
26635-64-3	Isooctane	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
67-63-0	Isopropanol	2.0	J, QC-1, QC-5	ug/m3	1.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
591-78-6	Methyl Butyl Ketone	1.9	U	ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
78-93-3	Methyl Ethyl Ketone	32		ug/m3	27	6/26/13 10:42	6/27/13 2:00	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	0.74	J, Q-2	ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-09-2	Methylene Chloride	1.5	U	ug/m3	1.5	6/29/13 17:13	6/30/13 5:15	EPA TO-15
95-47-6	o-Xylene	2.4		ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
100-42-5	Styrene	1.8	J, Q-2	ug/m3	1.9	6/29/13 17:13	6/30/13 5:15	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	2.8	J, Q-2	ug/m3	3.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
109-99-9	Tetrahydrofuran	1.3	U	ug/m3	1.3	6/29/13 17:13	6/30/13 5:15	EPA TO-15
108-88-3	Toluene	15		ug/m3	1.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID:** LLL4SG0613**Lab ID:** E132402-20**Station ID:** LLL4**Matrix:** Soil Gas**Date Collected:** 6/4/13 16:44

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
156-60-5	trans-1,2-Dichloroethene	1.7	U	ug/m3	1.7	6/29/13 17:13	6/30/13 5:15	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	2.1	U	ug/m3	2.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	2.4	U	ug/m3	2.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	3.0		ug/m3	2.4	6/29/13 17:13	6/30/13 5:15	EPA TO-15
108-05-4	Vinyl acetate	1.6	U	ug/m3	1.6	6/29/13 17:13	6/30/13 5:15	EPA TO-15
593-60-2	Vinyl bromide	2.0	U	ug/m3	2.0	6/29/13 17:13	6/30/13 5:15	EPA TO-15
75-01-4	Vinyl chloride	1.1	U	ug/m3	1.1	6/29/13 17:13	6/30/13 5:15	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL5SG0613****Lab ID: E132402-21****Station ID: LLL5****Matrix: Soil Gas****Date Collected: 6/5/13 10:23**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
R4-7156	(m- and/or p-)Xylene	3.5	J, Q-2, QI-1	ug/m3	19	6/29/13 17:13	6/30/13 7:44	EPA TO-15
71-55-6	1,1,1-Trichloroethane	12	U	ug/m3	12	6/29/13 17:13	6/30/13 7:44	EPA TO-15
79-34-5	1,1,2,2-Tetrachloroethane	15	U, J, QI-1	ug/m3	15	6/29/13 17:13	6/30/13 7:44	EPA TO-15
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	17	U	ug/m3	17	6/29/13 17:13	6/30/13 7:44	EPA TO-15
79-00-5	1,1,2-Trichloroethane	12	U	ug/m3	12	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-34-3	1,1-Dichloroethane	8.9	U	ug/m3	8.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-35-4	1,1-Dichloroethene (1,1-Dichloroethylene)	8.5	U	ug/m3	8.5	6/29/13 17:13	6/30/13 7:44	EPA TO-15
120-82-1	1,2,4-Trichlorobenzene	14	U, J, QC-3, QC-5, QI-1	ug/m3	14	6/29/13 17:13	6/30/13 7:44	EPA TO-15
95-63-6	1,2,4-Trimethylbenzene	1.8	J, Q-2, QI-1	ug/m3	11	6/29/13 17:13	6/30/13 7:44	EPA TO-15
106-93-4	1,2-Dibromoethane (EDB)	17	U	ug/m3	17	6/29/13 17:13	6/30/13 7:44	EPA TO-15
95-50-1	1,2-Dichlorobenzene	13	U, J, QI-1	ug/m3	13	6/29/13 17:13	6/30/13 7:44	EPA TO-15
107-06-2	1,2-Dichloroethane	9.0	U	ug/m3	9.0	6/29/13 17:13	6/30/13 7:44	EPA TO-15
78-87-5	1,2-Dichloroproppane	10	U	ug/m3	10	6/29/13 17:13	6/30/13 7:44	EPA TO-15
76-14-2	1,2-Dichlorotetrafluoroethane (Freon 114)	300		ug/m3	14	6/29/13 17:13	6/30/13 7:44	EPA TO-15
108-67-8	1,3,5-Trimethylbenzene	10	U, J, QI-1	ug/m3	10	6/29/13 17:13	6/30/13 7:44	EPA TO-15
106-99-0	1,3-Butadiene	28		ug/m3	9.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
541-73-1	1,3-Dichlorobenzene	13	U, J, QI-1	ug/m3	13	6/29/13 17:13	6/30/13 7:44	EPA TO-15
106-46-7	1,4-Dichlorobenzene	13	U, J, QI-1	ug/m3	13	6/29/13 17:13	6/30/13 7:44	EPA TO-15
123-91-1	1,4-Dioxane	8.1	U, J, QC-5	ug/m3	8.1	6/29/13 17:13	6/30/13 7:44	EPA TO-15
107-05-1	3-Chloropropene	14	U	ug/m3	14	6/29/13 17:13	6/30/13 7:44	EPA TO-15
622-96-8	4-Ethyltoluene	22	U, J, QI-1	ug/m3	22	6/29/13 17:13	6/30/13 7:44	EPA TO-15
67-64-1	Acetone	200	J, QC-4	ug/m3	5.4	6/29/13 17:13	6/30/13 7:44	EPA TO-15
107-13-1	Acrylonitrile	4.4	U	ug/m3	4.4	6/29/13 17:13	6/30/13 7:44	EPA TO-15
71-43-2	Benzene	12		ug/m3	7.0	6/29/13 17:13	6/30/13 7:44	EPA TO-15
100-44-7	Benzyl chloride	12	U, J, QC-5, QI-1	ug/m3	12	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-27-4	Bromodichloromethane	15	U	ug/m3	15	6/29/13 17:13	6/30/13 7:44	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL5SG0613****Lab ID: E132402-21****Station ID: LLL5****Matrix: Soil Gas****Date Collected: 6/5/13 10:23**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
75-25-2	Bromoform	23	U, J, QI-1	ug/m3	23	6/29/13 17:13	6/30/13 7:44	EPA TO-15
74-83-9	Bromomethane	8.5	U	ug/m3	8.5	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-15-0	Carbon disulfide	5.5	J, Q-2	ug/m3	7.0	6/29/13 17:13	6/30/13 7:44	EPA TO-15
56-23-5	Carbon Tetrachloride	14	U	ug/m3	14	6/29/13 17:13	6/30/13 7:44	EPA TO-15
108-90-7	Chlorobenzene	10	U, J, QI-1	ug/m3	10	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-00-3	Chloroethane	5.8	U	ug/m3	5.8	6/29/13 17:13	6/30/13 7:44	EPA TO-15
67-66-3	Chloroform	2.7	J, Q-2	ug/m3	11	6/29/13 17:13	6/30/13 7:44	EPA TO-15
74-87-3	Chloromethane	4.4	U	ug/m3	4.4	6/29/13 17:13	6/30/13 7:44	EPA TO-15
156-59-2	cis-1,2-Dichloroethene	8.8	U	ug/m3	8.8	6/29/13 17:13	6/30/13 7:44	EPA TO-15
10061-01-5	cis-1,3-Dichloropropene	9.9	U	ug/m3	9.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
110-82-7	Cyclohexane	4.8	J, Q-2	ug/m3	7.8	6/29/13 17:13	6/30/13 7:44	EPA TO-15
124-48-1	Dibromochloromethane	19	U	ug/m3	19	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-71-8	Dichlorodifluoromethane (Freon 12)	4.0	J, Q-2	ug/m3	10	6/29/13 17:13	6/30/13 7:44	EPA TO-15
141-78-6	Ethyl Acetate	8.1	U	ug/m3	8.1	6/29/13 17:13	6/30/13 7:44	EPA TO-15
100-41-4	Ethyl Benzene	2.3	J, Q-2, QI-1	ug/m3	9.6	6/29/13 17:13	6/30/13 7:44	EPA TO-15
142-82-5	Heptane	14		ug/m3	9.3	6/29/13 17:13	6/30/13 7:44	EPA TO-15
87-68-3	Hexachlorobutadiene	23	U, J, QC-5, QI-1	ug/m3	23	6/29/13 17:13	6/30/13 7:44	EPA TO-15
110-54-3	Hexane	18		ug/m3	7.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
26635-64-3	Isooctane	11	U	ug/m3	11	6/29/13 17:13	6/30/13 7:44	EPA TO-15
67-63-0	Isopropanol	5.6	U, J, QC-1, QC-5	ug/m3	5.6	6/29/13 17:13	6/30/13 7:44	EPA TO-15
591-78-6	Methyl Butyl Ketone	6.5	J, Q-2	ug/m3	9.3	6/29/13 17:13	6/30/13 7:44	EPA TO-15
78-93-3	Methyl Ethyl Ketone	68		ug/m3	6.7	6/29/13 17:13	6/30/13 7:44	EPA TO-15
108-10-1	Methyl Isobutyl Ketone	1.5	J, Q-2	ug/m3	9.3	6/29/13 17:13	6/30/13 7:44	EPA TO-15
1634-04-4	Methyl T-Butyl Ether (MTBE)	8.6	U	ug/m3	8.6	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-09-2	Methylene Chloride	7.5	U	ug/m3	7.5	6/29/13 17:13	6/30/13 7:44	EPA TO-15
95-47-6	o-Xylene	1.6	J, Q-2, QI-1	ug/m3	9.7	6/29/13 17:13	6/30/13 7:44	EPA TO-15
100-42-5	Styrene	1.9	J, Q-2, QI-1	ug/m3	9.3	6/29/13 17:13	6/30/13 7:44	EPA TO-15
127-18-4	Tetrachloroethene (Tetrachloroethylene)	10	J, Q-2	ug/m3	15	6/29/13 17:13	6/30/13 7:44	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics

**Project: 13-0364, Lee's Lane Landfill Satellite Site****Sample ID: LLL5SG0613****Lab ID: E132402-21****Station ID: LLL5****Matrix: Soil Gas****Date Collected: 6/5/13 10:23**

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
109-99-9	Tetrahydrofuran	6.7	U	ug/m3	6.7	6/29/13 17:13	6/30/13 7:44	EPA TO-15
108-88-3	Toluene	12		ug/m3	8.3	6/29/13 17:13	6/30/13 7:44	EPA TO-15
156-60-5	trans-1,2-Dichloroethene	8.7	U	ug/m3	8.7	6/29/13 17:13	6/30/13 7:44	EPA TO-15
10061-02-6	trans-1,3-Dichloropropene	10	U	ug/m3	10	6/29/13 17:13	6/30/13 7:44	EPA TO-15
79-01-6	Trichloroethene (Trichloroethylene)	12	U	ug/m3	12	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-69-4	Trichlorofluoromethane (Freon 11)	1.5	J, Q-2	ug/m3	12	6/29/13 17:13	6/30/13 7:44	EPA TO-15
108-05-4	Vinyl acetate	7.9	U	ug/m3	7.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
593-60-2	Vinyl bromide	9.9	U	ug/m3	9.9	6/29/13 17:13	6/30/13 7:44	EPA TO-15
75-01-4	Vinyl chloride	5.7	U	ug/m3	5.7	6/29/13 17:13	6/30/13 7:44	EPA TO-15



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK2)**

Prepared: 06/11/13 Analyzed: 06/26/13

**EPA TO-15**

(m- and/or p-)Xylene	U	4.2	ug/m3							U
1,1,1-Trichloroethane	U	2.6	"							U
1,1,2,2-Tetrachloroethane	U	3.3	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.6	"							U
1,1,2-Trichloroethane	U	2.6	"							U
1,1-Dichloroethane	U	1.9	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.8	"							U
1,2,4-Trichlorobenzene	U	3.1	"							U
1,2,4-Trimethylbenzene	U	2.3	"							U
1,2-Dibromoethane (EDB)	U	3.6	"							U
1,2-Dichlorobenzene	U	2.8	"							U
1,2-Dichloroethane	U	1.9	"							U
1,2-Dichloropropane	U	2.2	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	3.1	"							U
1,3,5-Trimethylbenzene	U	2.2	"							U
1,3-Butadiene	U	2.1	"							U
1,3-Dichlorobenzene	U	2.9	"							U
1,4-Dichlorobenzene	U	2.9	"							U
1,4-Dioxane	U	1.8	"							U
3-Chloropropene	U	3.0	"							U
4-Ethyltoluene	U	4.7	"							U
Acetone	0.42222	1.2	"						B-3, Q-2, J	
Acrylonitrile	U	0.96	"							U
Benzene	U	1.5	"							U
Benzyl chloride	U	2.5	"							U
Bromodichloromethane	U	3.3	"							U
Bromoform	U	5.0	"							U
Bromomethane	U	1.8	"							U
Carbon disulfide	U	1.5	"							U
Carbon Tetrachloride	U	2.9	"							U
Chlorobenzene	U	2.2	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.3	"							U
Chloromethane	U	0.96	"							U
cis-1,2-Dichloroethene	U	1.9	"							U
cis-1,3-Dichloropropene	U	2.1	"							U
Cyclohexane	U	1.7	"							U
Dibromochloromethane	U	4.2	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK2)**

Prepared: 06/11/13 Analyzed: 06/26/13

Dichlorodifluoromethane (Freon 12)	U	2.2	ug/m3							U
Ethyl Acetate	U	1.8	"							U
Ethyl Benzene	U	2.1	"							U
Heptane	U	2.0	"							U
Hexachlorobutadiene	U	5.0	"							U
Hexane	U	1.7	"							U
Isooctane	U	2.3	"							U
Isopropanol	U	1.2	"							U
Methyl Butyl Ketone	U	2.0	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	2.0	"							U
Methyl T-Butyl Ether (MTBE)	U	1.8	"							U
Methylene Chloride	U	1.6	"							U
o-Xylene	U	2.1	"							U
Styrene	U	2.0	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.2	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.8	"							U
trans-1,2-Dichloroethene	U	1.9	"							U
trans-1,3-Dichloropropene	U	2.2	"							U
Trichloroethene (Trichloroethylene)	U	2.6	"							U
Trichlorofluoromethane (Freon 11)	U	2.6	"							U
Vinyl acetate	U	1.7	"							U
Vinyl bromide	U	2.1	"							U
Vinyl chloride	U	1.2	"							U

**Blank (1306125-BLK3)**

Prepared: 06/11/13 Analyzed: 06/26/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3							U
1,1,1-Trichloroethane	U	2.4	"							U
1,1,2,2-Tetrachloroethane	U	3.1	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"							U
1,1,2-Trichloroethane	U	2.5	"							U
1,1-Dichloroethane	U	1.8	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"							U
1,2,4-Trichlorobenzene	U	2.9	"							U
1,2,4-Trimethylbenzene	U	2.2	"							U
1,2-Dibromoethane (EDB)	U	3.4	"							U
1,2-Dichlorobenzene	U	2.6	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK3)**

Prepared: 06/11/13 Analyzed: 06/26/13

1,2-Dichloroethane	U	1.8	ug/m3							U
1,2-Dichloropropane	U	2.1	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	2.9	"							U
1,3,5-Trimethylbenzene	U	2.1	"							U
1,3-Butadiene	U	2.0	"							U
1,3-Dichlorobenzene	U	2.7	"							U
1,4-Dichlorobenzene	U	2.7	"							U
1,4-Dioxane	U	1.7	"							U
3-Chloropropene	U	2.8	"							U
4-Ethyltoluene	U	4.5	"							U
Acetone	U	1.1	"							U
Acrylonitrile	U	0.90	"							U
Benzene	U	1.4	"							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	U	2.8	"							U
Chlorobenzene	U	2.1	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.1	"							U
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U
Dichlorodifluoromethane (Freon 12)	U	2.1	"							U
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	U	1.1	"							U
Methyl Butyl Ketone	U	1.9	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	1.9	"							U
Methyl T-Butyl Ether (MTBE)	U	1.7	"							U
Methylene Chloride	U	1.5	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK3)**

Prepared: 06/11/13 Analyzed: 06/26/13

o-Xylene	U	2.0	ug/m3						U
Styrene	U	1.9	"						U
Tetrachloroethene (Tetrachloroethylene)	U	3.0	"						U
Tetrahydrofuran	U	1.4	"						U
Toluene	U	1.7	"						U
trans-1,2-Dichloroethene	U	1.8	"						U
trans-1,3-Dichloropropene	U	2.1	"						U
Trichloroethene (Trichloroethylene)	U	2.4	"						U
Trichlorofluoromethane (Freon 11)	U	2.5	"						U
Vinyl acetate	U	1.6	"						U
Vinyl bromide	U	2.0	"						U
Vinyl chloride	U	1.2	"						U

**Blank (1306125-BLK4)**

Prepared: 06/11/13 Analyzed: 06/26/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3						U
1,1,1-Trichloroethane	U	2.4	"						U
1,1,2,2-Tetrachloroethane	U	3.1	"						U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"						U
1,1,2-Trichloroethane	U	2.5	"						U
1,1-Dichloroethane	U	1.8	"						U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"						U
1,2,4-Trichlorobenzene	U	2.9	"						U
1,2,4-Trimethylbenzene	U	2.2	"						U
1,2-Dibromoethane (EDB)	U	3.4	"						U
1,2-Dichlorobenzene	U	2.6	"						U
1,2-Dichloroethane	U	1.8	"						U
1,2-Dichloropropane	U	2.1	"						U
1,2-Dichlortetrafluoroethane (Freon 114)	U	2.9	"						U
1,3,5-Trimethylbenzene	U	2.1	"						U
1,3-Butadiene	U	2.0	"						U
1,3-Dichlorobenzene	U	2.7	"						U
1,4-Dichlorobenzene	U	2.7	"						U
1,4-Dioxane	U	1.7	"						U
3-Chloropropene	U	2.8	"						U
4-Ethyltoluene	U	4.5	"						U
Acetone	0.23077	1.1	"					B-3, Q-2, J	
Acrylonitrile	U	0.90	"					U	



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK4)**

Prepared: 06/11/13 Analyzed: 06/26/13

Benzene	U	1.4	ug/m3							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	U	2.8	"							U
Chlorobenzene	U	2.1	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.1	"							U
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U
Dichlorodifluoromethane (Freon 12)	U	2.1	"							U
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	0.20979	1.1	"							B-3, Q-2, J
Methyl Butyl Ketone	U	1.9	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	1.9	"							U
Methyl T-Butyl Ether (MTBE)	U	1.7	"							U
Methylene Chloride	0.12587	1.5	"							B-3, Q-2, J
o-Xylene	U	2.0	"							U
Styrene	U	1.9	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.0	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.7	"							U
trans-1,2-Dichloroethene	U	1.8	"							U
trans-1,3-Dichloropropene	U	2.1	"							U
Trichloroethene (Trichloroethylene)	U	2.4	"							U
Trichlorofluoromethane (Freon 11)	U	2.5	"							U
Vinyl acetate	U	1.6	"							U
Vinyl bromide	U	2.0	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****Blank (1306125-BLK4)**

Prepared: 06/11/13 Analyzed: 06/26/13

Vinyl chloride

U

1.2

ug/m3

U

**LCS (1306125-BS1)**

Prepared &amp; Analyzed: 06/26/13

**EPA TO-15**

(m- and/or p-)Xylene	9.8500		ug/m3	9.4000		105	72-140			
1,1,1-Trichloroethane	5.8900		"	5.8000		102	68-144			
1,1,2,2-Tetrachloroethane	7.3700		"	7.3000		101	64-146			
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	8.9600		"	8.0000		112	73-140			
1,1,2-Trichloroethane	6.1500		"	5.8000		106	71-142			
1,1-Dichloroethane	4.2300		"	4.3000		98.4	72-136			
1,1-Dichloroethene (1,1-Dichloroethylene)	4.3300		"	4.1000		106	70-140			
1,2,4-Trichlorobenzene	6.2500		"	7.0000		89.3	15-159			QC-3
1,2,4-Trimethylbenzene	5.8600		"	5.2000		113	66-136			
1,2-Dibromoethane (EDB)	8.5600		"	8.2000		104	70-138			
1,2-Dichlorobenzene	6.9900		"	6.3000		111	68-137			
1,2-Dichloroethane	3.7300		"	4.3000		86.7	71-137			
1,2-Dichloropropane	4.7600		"	4.9000		97.1	69-140			
1,2-Dichlorotetrafluoroethane (Freon 114)	6.7700		"	7.0000		96.7	69-147			
1,3,5-Trimethylbenzene	5.5300		"	5.1000		108	66-141			
1,3-Butadiene	4.9800		"	4.8000		104	62-151			
1,3-Dichlorobenzene	7.3500		"	6.4000		115	69-136			
1,4-Dichlorobenzene	7.6700		"	6.4000		120	68-133			QC-6
1,4-Dioxane	6.0700		"	4.0000		152	37-149			QC-6, QL-2
3-Chloropropene	6.7600		"	6.7000		101	67-140			
4-Ethyltoluene	12.050		"	10.700		113	65-146			
Acetone	2.6700		"	2.6000		103	71-154			
Acrylonitrile	2.6200		"	2.1000		125	59-147			
Benzene	3.3900		"	3.4000		99.7	70-140			
Benzyl chloride	6.7500		"	5.7000		118	46-145			QC-6
Bromodichloromethane	6.8300		"	7.4000		92.3	66-143			
Bromoform	13.500		"	11.400		118	14-168			QC-6
Bromomethane	3.5500		"	4.1000		86.6	52-169			
Carbon disulfide	4.3400		"	3.4000		128	71-139			
Carbon Tetrachloride	7.2700		"	6.6000		110	70-143			
Chlorobenzene	4.8700		"	5.0000		97.4	73-136			
Chloroethane	2.7200		"	2.8000		97.1	61-168			
Chloroform	4.5100		"	5.1000		88.4	70-141			
Chloromethane	2.1200		"	2.2000		96.4	59-155			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****LCS (1306125-BS1)**

Prepared &amp; Analyzed: 06/26/13

cis-1,2-Dichloroethene	4.6600		ug/m3	4.2000		111	70-136		
cis-1,3-Dichloropropene	4.1400		"	4.8000		86.2	67-139		
Cyclohexane	4.3300		"	3.8000		114	70-135		
Dibromochloromethane	10.420		"	9.4000		111	67-139		
Dichlorodifluoromethane (Freon 12)	5.2700		"	5.0000		105	73-143		
Ethyl Acetate	5.3500		"	4.0000		134	65-141		
Ethyl Benzene	4.8800		"	4.6000		106	70-137		
Heptane	4.5300		"	4.5000		101	65-140		
Hexachlorobutadiene	10.400		"	11.200		92.9	34-171		QC-3
Hexane	4.3500		"	3.9000		112	71-133		
Isooctane	5.7400		"	5.1000		113	69-137		
Isopropanol	1.3000		"	2.7000		48.1	10-171		QC-3
Methyl Butyl Ketone	5.0800		"	4.5000		113	30-161		QC-3, QC-6
Methyl Ethyl Ketone	3.7200		"	3.2000		116	65-141		
Methyl Isobutyl Ketone	5.7000		"	4.5000		127	60-150		
Methyl T-Butyl Ether (MTBE)	4.7800		"	4.1000		117	73-138		
Methylene Chloride	3.8300		"	3.6000		106	70-142		
o-Xylene	5.0900		"	4.7000		108	72-136		
Styrene	5.4900		"	4.5000		122	70-136		QC-6
Tetrachloroethene (Tetrachloroethylene)	7.1300		"	7.2000		99.0	68-148		
Tetrahydrofuran	3.4900		"	3.2000		109	59-149		
Toluene	4.1500		"	4.0000		104	72-138		
trans-1,2-Dichloroethene	4.5300		"	4.2000		108	73-136		
trans-1,3-Dichloropropene	4.4000		"	5.0000		88.0	66-141		
Trichloroethene (Trichloroethylene)	5.8400		"	5.8000		101	69-137		
Trichlorofluoromethane (Freon 11)	6.5700		"	5.9000		111	74-141		
Vinyl acetate	5.0600		"	3.9000		130	57-149		
Vinyl bromide	5.6800		"	4.8000		118	69-137		
Vinyl chloride	2.5500		"	2.7000		94.4	62-151		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****MRL Verification (1306125-PS1)**

Prepared &amp; Analyzed: 06/26/13

**EPA TO-15**

(m- and/or p-)Xylene	1.9200		ug/m3	1.8700	103	52-160				MRL-5
1,1,1-Trichloroethane	1.2100		"	1.1600	104	48-164				MRL-5
1,1,2,2-Tetrachloroethane	1.5800		"	1.4700	107	44-166				MRL-5
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.9200		"	1.6100	119	53-160				MRL-5
1,1,2-Trichloroethane	1.4300		"	1.1700	122	51-162				MRL-5
1,1-Dichloroethane	0.90000		"	0.86000	105	52-156				MRL-5
1,1-Dichloroethene (1,1-Dichloroethylene)	0.99000		"	0.82000	121	50-160				MRL-5
1,2,4-Trichlorobenzene	4.0800		"	1.3900	294	10-179				MRL-5, QC-3, QR-2
1,2,4-Trimethylbenzene	1.0300		"	1.0300	100	46-156				MRL-5
1,2-Dibromoethane (EDB)	1.9500		"	1.6400	119	50-158				MRL-5
1,2-Dichlorobenzene	1.5800		"	1.2600	125	48-157				MRL-5
1,2-Dichloroethane	0.93000		"	0.87000	107	51-157				MRL-5
1,2-Dichloropropane	1.0400		"	0.99000	105	49-160				MRL-5
1,2-Dichlorotetrafluoroethane (Freon 114)	1.5000		"	1.4000	107	49-167				MRL-5
1,3,5-Trimethylbenzene	1.0600		"	1.0100	105	46-161				MRL-5
1,3-Butadiene	1.1100		"	0.96000	116	42-171				MRL-5
1,3-Dichlorobenzene	1.6200		"	1.2900	126	49-156				MRL-5
1,4-Dichlorobenzene	1.6500		"	1.2900	128	48-153				MRL-5, QC-6
1,4-Dioxane	1.2000		"	0.79000	152	17-169				MRL-5, QC-6
3-Chloropropene	1.4200		"	1.3300	107	47-160				MRL-5
4-Ethyltoluene	2.1500		"	2.1300	101	45-166				MRL-5
Acetone	0.59000		"	0.52000	113	51-174				MRL-5
Acrylonitrile	0.47000		"	0.43000	109	39-167				MRL-5
Benzene	0.76000		"	0.68000	112	50-160				MRL-5
Benzyl chloride	1.3900		"	1.1400	122	26-165				MRL-5, QC-6
Bromodichloromethane	1.5900		"	1.4700	108	46-163				MRL-5
Bromoform	2.6900		"	2.2700	119	10-188				MRL-5, QC-6
Bromomethane	0.83000		"	0.82000	101	32-189				MRL-5
Carbon disulfide	0.91000		"	0.68000	134	51-159				MRL-5
Carbon Tetrachloride	1.5400		"	1.3200	117	50-163				MRL-5
Chlorobenzene	1.1400		"	0.99000	115	53-156				MRL-5
Chloroethane	0.62000		"	0.56000	111	41-188				MRL-5
Chloroform	1.0800		"	1.0200	106	50-161				MRL-5
Chloromethane	0.49000		"	0.43000	114	39-175				MRL-5
cis-1,2-Dichloroethene	0.98000		"	0.85000	115	50-156				MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306125 - V TO-15 Air Canister****MRL Verification (1306125-PS1)**

Prepared &amp; Analyzed: 06/26/13

cis-1,3-Dichloropropene	0.95000		ug/m3	0.96000	99.0	47-159				MRL-5
Cyclohexane	0.88000		"	0.76000	116	50-155				MRL-5
Dibromochloromethane	2.2300		"	1.8700	119	47-159				MRL-5
Dichlorodifluoromethane (Freon 12)	1.1700		"	1.0000	117	53-163				MRL-5
Ethyl Acetate	0.94000		"	0.79000	119	45-161				MRL-5
Ethyl Benzene	0.98000		"	0.93000	105	50-157				MRL-5
Heptane	1.0100		"	0.90000	112	45-160				MRL-5
Hexachlorobutadiene	4.3700		"	2.2400	195	14-191				MRL-5, QC-3, QR-2
Hexane	0.88000		"	0.77000	114	51-153				MRL-5
Isooctane	1.1200		"	1.0300	109	49-157				MRL-5
Isopropanol	1.0300		"	0.54000	191	10-191				MRL-5, QC-3
Methyl Butyl Ketone	1.3100		"	0.90000	146	10-181				MRL-5, QC-3, QC-6
Methyl Ethyl Ketone	0.73000		"	0.65000	112	45-161				MRL-5
Methyl Isobutyl Ketone	1.1400		"	0.90000	127	40-170				MRL-5
Methyl T-Butyl Ether (MTBE)	0.91000		"	0.83000	110	53-158				MRL-5
Methylene Chloride	0.83000		"	0.73000	114	50-162				MRL-5
o-Xylene	0.92000		"	0.94000	97.9	52-156				MRL-5
Styrene	0.97000		"	0.90000	108	50-156				MRL-5, QC-6
Tetrachloroethene (Tetrachloroethylene)	1.6900		"	1.4400	117	48-168				MRL-5
Tetrahydrofuran	0.66000		"	0.65000	102	39-169				MRL-5
Toluene	0.89000		"	0.81000	110	52-158				MRL-5
trans-1,2-Dichloroethene	0.99000		"	0.84000	118	53-156				MRL-5
trans-1,3-Dichloropropene	0.89000		"	1.0000	89.0	46-161				MRL-5
Trichloroethene (Trichloroethylene)	1.4800		"	1.1600	128	49-157				MRL-5
Trichlorofluoromethane (Freon 11)	1.4200		"	1.1800	120	54-161				MRL-5
Vinyl acetate	0.90000		"	0.77000	117	37-169				MRL-5
Vinyl bromide	1.1900		"	0.96000	124	49-157				MRL-5
Vinyl chloride	0.56000		"	0.55000	102	42-171				MRL-5



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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306131 - V TO-15 Air Canister****Blank (1306131-BLK2)**

Prepared: 06/11/13 Analyzed: 06/29/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3							U
1,1,1-Trichloroethane	U	2.4	"							U
1,1,2,2-Tetrachloroethane	U	3.1	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"							U
1,1,2-Trichloroethane	U	2.5	"							U
1,1-Dichloroethane	U	1.8	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"							U
1,2,4-Trichlorobenzene	U	2.9	"							U
1,2,4-Trimethylbenzene	U	2.2	"							U
1,2-Dibromoethane (EDB)	U	3.4	"							U
1,2-Dichlorobenzene	U	2.6	"							U
1,2-Dichloroethane	U	1.8	"							U
1,2-Dichloropropane	U	2.1	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	2.9	"							U
1,3,5-Trimethylbenzene	U	2.1	"							U
1,3-Butadiene	U	2.0	"							U
1,3-Dichlorobenzene	U	2.7	"							U
1,4-Dichlorobenzene	U	2.7	"							U
1,4-Dioxane	U	1.7	"							U
3-Chloropropene	U	2.8	"							U
4-Ethyltoluene	U	4.5	"							U
Acetone	U	1.1	"							U
Acrylonitrile	U	0.90	"							U
Benzene	U	1.4	"							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	U	2.8	"							U
Chlorobenzene	U	2.1	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.1	"							U
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306131 - V TO-15 Air Canister****Blank (1306131-BLK2)**

Prepared: 06/11/13 Analyzed: 06/29/13

Dichlorodifluoromethane (Freon 12)	U	2.1	ug/m3							U
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	U	1.1	"							U
Methyl Butyl Ketone	U	1.9	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	1.9	"							U
Methyl T-Butyl Ether (MTBE)	U	1.7	"							U
Methylene Chloride	0.10490	1.5	"							B-3, Q-2, J
o-Xylene	U	2.0	"							U
Styrene	U	1.9	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.0	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.7	"							U
trans-1,2-Dichloroethene	U	1.8	"							U
trans-1,3-Dichloropropene	U	2.1	"							U
Trichloroethene (Trichloroethylene)	U	2.4	"							U
Trichlorofluoromethane (Freon 11)	U	2.5	"							U
Vinyl acetate	U	1.6	"							U
Vinyl bromide	U	2.0	"							U
Vinyl chloride	U	1.2	"							U

**LCS (1306131-BS1)**

Prepared &amp; Analyzed: 06/29/13

**EPA TO-15**

(m- and/or p-)Xylene	10.010	ug/m3	9.4000	106	72-140		
1,1,1-Trichloroethane	6.0100	"	5.8000	104	68-144		
1,1,2,2-Tetrachloroethane	7.7700	"	7.3000	106	64-146		
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	8.4400	"	8.0000	106	73-140		
1,1,2-Trichloroethane	5.2600	"	5.8000	90.7	71-142		
1,1-Dichloroethane	4.7900	"	4.3000	111	72-136		
1,1-Dichloroethene (1,1-Dichloroethylene)	4.3100	"	4.1000	105	70-140		
1,2,4-Trichlorobenzene	5.0600	"	7.0000	72.3	15-159		
1,2,4-Trimethylbenzene	5.2700	"	5.2000	101	66-136		
1,2-Dibromoethane (EDB)	7.0700	"	8.2000	86.2	70-138		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1306131 - V TO-15 Air Canister****LCS (1306131-BS1)**

Prepared &amp; Analyzed: 06/29/13

1,2-Dichlorobenzene	6.1000		ug/m3	6.3000		96.8	68-137		
1,2-Dichloroethane	4.2600		"	4.3000		99.1	71-137		
1,2-Dichloropropane	5.3200		"	4.9000		109	69-140		
1,2-Dichlorotetrafluoroethane (Freon 114)	8.1500		"	7.0000		116	69-147		
1,3,5-Trimethylbenzene	5.2200		"	5.1000		102	66-141		
1,3-Butadiene	4.6300		"	4.8000		96.5	62-151		
1,3-Dichlorobenzene	5.7700		"	6.4000		90.2	69-136		
1,4-Dichlorobenzene	5.7900		"	6.4000		90.5	68-133		
1,4-Dioxane	3.8600		"	4.0000		96.5	37-149		QC-5
3-Chloropropene	5.8900		"	6.7000		87.9	67-140		
4-Ethyltoluene	11.060		"	10.700		103	65-146		
Acetone	2.3200		"	2.6000		89.2	71-154		
Acrylonitrile	2.1400		"	2.1000		102	59-147		
Benzene	3.6100		"	3.4000		106	70-140		
Benzyl chloride	5.0100		"	5.7000		87.9	46-145		QC-5
Bromodichloromethane	7.6100		"	7.4000		103	66-143		
Bromoform	11.470		"	11.400		101	14-168		
Bromomethane	5.1700		"	4.1000		126	52-169		
Carbon disulfide	4.1200		"	3.4000		121	71-139		
Carbon Tetrachloride	6.2400		"	6.6000		94.5	70-143		
Chlorobenzene	4.6600		"	5.0000		93.2	73-136		
Chloroethane	3.6900		"	2.8000		132	61-168		
Chloroform	5.3700		"	5.1000		105	70-141		
Chloromethane	1.8900		"	2.2000		85.9	59-155		
cis-1,2-Dichloroethene	4.2800		"	4.2000		102	70-136		
cis-1,3-Dichloropropene	4.9300		"	4.8000		103	67-139		
Cyclohexane	3.6900		"	3.8000		97.1	70-135		
Dibromochloromethane	8.0300		"	9.4000		85.4	67-139		
Dichlorodifluoromethane (Freon 12)	5.5000		"	5.0000		110	73-143		
Ethyl Acetate	4.8300		"	4.0000		121	65-141		
Ethyl Benzene	4.8800		"	4.6000		106	70-137		
Heptane	3.8600		"	4.5000		85.8	65-140		
Hexachlorobutadiene	12.650		"	11.200		113	34-171		QC-5
Hexane	4.0800		"	3.9000		105	71-133		
Isooctane	5.1200		"	5.1000		100	69-137		
Isopropanol	1.7600		"	2.7000		65.2	10-171		QC-5
Methyl Butyl Ketone	3.7500		"	4.5000		83.3	30-161		
Methyl Ethyl Ketone	3.8300		"	3.2000		120	65-141		
Methyl Isobutyl Ketone	3.7700		"	4.5000		83.8	60-150		
Methyl T-Butyl Ether (MTBE)	5.2500		"	4.1000		128	73-138		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1306131 - V TO-15 Air Canister****LCS (1306131-BS1)**

Prepared &amp; Analyzed: 06/29/13

Methylene Chloride	3.2500	ug/m3	3.6000		90.3	70-142	
o-Xylene	5.0800	"	4.7000		108	72-136	
Styrene	4.3500	"	4.5000		96.7	70-136	
Tetrachloroethene (Tetrachloroethylene)	6.6100	"	7.2000		91.8	68-148	
Tetrahydrofuran	2.8700	"	3.2000		89.7	59-149	
Toluene	3.8600	"	4.0000		96.5	72-138	
trans-1,2-Dichloroethene	4.4400	"	4.2000		106	73-136	
trans-1,3-Dichloropropene	5.1300	"	5.0000		103	66-141	
Trichloroethene (Trichloroethylene)	4.7200	"	5.8000		81.4	69-137	
Trichlorofluoromethane (Freon 11)	6.1800	"	5.9000		105	74-141	
Vinyl acetate	3.4400	"	3.9000		88.2	57-149	
Vinyl bromide	4.8800	"	4.8000		102	69-137	
Vinyl chloride	3.3600	"	2.7000		124	62-151	

**MRL Verification (1306131-PS1)**

Prepared &amp; Analyzed: 06/29/13

**EPA TO-15**

(m- and/or p-)Xylene	1.7000	ug/m3	1.8700		90.9	52-160	MRL-5
1,1,1-Trichloroethane	1.1900	"	1.1600		103	48-164	MRL-5
1,1,2,2-Tetrachloroethane	1.5000	"	1.4700		102	44-166	MRL-5
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.7500	"	1.6100		109	53-160	MRL-5
1,1,2-Trichloroethane	1.0800	"	1.1700		92.3	51-162	MRL-5
1,1-Dichloroethane	0.94000	"	0.86000		109	52-156	MRL-5
1,1-Dichloroethene (1,1-Dichloroethylene)	0.86000	"	0.82000		105	50-160	MRL-5
1,2,4-Trichlorobenzene	1.8100	"	1.3900		130	10-179	MRL-5, QC-3, QC-5
1,2,4-Trimethylbenzene	0.76000	"	1.0300		73.8	46-156	MRL-5
1,2-Dibromoethane (EDB)	1.3900	"	1.6400		84.8	50-158	MRL-5
1,2-Dichlorobenzene	1.1700	"	1.2600		92.9	48-157	MRL-5
1,2-Dichloroethane	0.89000	"	0.87000		102	51-157	MRL-5
1,2-Dichloropropane	1.0100	"	0.99000		102	49-160	MRL-5
1,2-Dichlorotetrafluoroethane (Freon 114)	1.6300	"	1.4000		116	49-167	MRL-5
1,3,5-Trimethylbenzene	0.80000	"	1.0100		79.2	46-161	MRL-5
1,3-Butadiene	0.95000	"	0.96000		99.0	42-171	MRL-5
1,3-Dichlorobenzene	1.0500	"	1.2900		81.4	49-156	MRL-5
1,4-Dichlorobenzene	1.0100	"	1.2900		78.3	48-153	MRL-5
1,4-Dioxane	0.69000	"	0.79000		87.3	17-169	MRL-5, QC-5
3-Chloropropene	1.0900	"	1.3300		82.0	47-160	MRL-5
4-Ethyltoluene	1.6700	"	2.1300		78.4	45-166	MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306131 - V TO-15 Air Canister****MRL Verification (1306131-PS1)**

Prepared &amp; Analyzed: 06/29/13

Acetone	0.46000		ug/m3	0.52000	88.5	51-174				MRL-5
Acrylonitrile	0.36000		"	0.43000	83.7	39-167				MRL-5
Benzene	0.72000		"	0.68000	106	50-160				MRL-5
Benzyl chloride	0.83000		"	1.1400	72.8	26-165				MRL-5, QC-5
Bromodichloromethane	1.5600		"	1.4700	106	46-163				MRL-5
Bromoform	2.0700		"	2.2700	91.2	10-188				MRL-5
Bromomethane	1.0600		"	0.82000	129	32-189				MRL-5
Carbon disulfide	0.81000		"	0.68000	119	51-159				MRL-5
Carbon Tetrachloride	1.2500		"	1.3200	94.7	50-163				MRL-5
Chlorobenzene	0.97000		"	0.99000	98.0	53-156				MRL-5
Chloroethane	0.74000		"	0.56000	132	41-188				MRL-5
Chloroform	1.1800		"	1.0200	116	50-161				MRL-5
Chloromethane	0.41000		"	0.43000	95.3	39-175				MRL-5
cis-1,2-Dichloroethene	0.81000		"	0.85000	95.3	50-156				MRL-5
cis-1,3-Dichloropropene	0.95000		"	0.96000	99.0	47-159				MRL-5
Cyclohexane	0.70000		"	0.76000	92.1	50-155				MRL-5
Dibromochloromethane	1.5100		"	1.8700	80.7	47-159				MRL-5
Dichlorodifluoromethane (Freon 12)	1.1500		"	1.0000	115	53-163				MRL-5
Ethyl Acetate	0.74000		"	0.79000	93.7	45-161				MRL-5
Ethyl Benzene	0.82000		"	0.93000	88.2	50-157				MRL-5
Heptane	0.70000		"	0.90000	77.8	45-160				MRL-5
Hexachlorobutadiene	3.5400		"	2.2400	158	14-191				MRL-5, QC-5
Hexane	0.75000		"	0.77000	97.4	51-153				MRL-5
Iooctane	0.96000		"	1.0300	93.2	49-157				MRL-5
Isopropanol	0.54000		"	0.54000	100	10-191				MRL-5, QC-5
Methyl Butyl Ketone	0.65000		"	0.90000	72.2	10-181				MRL-5
Methyl Ethyl Ketone	0.66000		"	0.65000	102	45-161				MRL-5
Methyl Isobutyl Ketone	0.61000		"	0.90000	67.8	40-170				MRL-5
Methyl T-Butyl Ether (MTBE)	0.83000		"	0.83000	100	53-158				MRL-5
Methylene Chloride	0.67000		"	0.73000	91.8	50-162				MRL-5
o-Xylene	0.79000		"	0.94000	84.0	52-156				MRL-5
Styrene	0.62000		"	0.90000	68.9	50-156				MRL-5
Tetrachloroethene (Tetrachloroethylene)	1.4300		"	1.4400	99.3	48-168				MRL-5
Tetrahydrofuran	0.51000		"	0.65000	78.5	39-169				MRL-5
Toluene	0.69000		"	0.81000	85.2	52-158				MRL-5
trans-1,2-Dichloroethene	0.88000		"	0.84000	105	53-156				MRL-5
trans-1,3-Dichloropropene	0.96000		"	1.0000	96.0	46-161				MRL-5
Trichloroethene (Trichloroethylene)	1.0400		"	1.1600	89.7	49-157				MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1306131 - V TO-15 Air Canister****MRL Verification (1306131-PS1)**

Prepared &amp; Analyzed: 06/29/13

Trichlorofluoromethane (Freon 11)	1.2500		ug/m3	1.1800		106	54-161			MRL-5
Vinyl acetate	0.53000		"	0.77000		68.8	37-169			MRL-5
Vinyl bromide	1.0100		"	0.96000		105	49-157			MRL-5
Vinyl chloride	0.66000		"	0.55000		120	42-171			MRL-5

**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK1)**

Prepared: 06/11/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	U	4.2	ug/m3							U
1,1,1-Trichloroethane	U	2.6	"							U
1,1,2,2-Tetrachloroethane	U	3.3	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.6	"							U
1,1,2-Trichloroethane	U	2.6	"							U
1,1-Dichloroethane	U	1.9	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.8	"							U
1,2,4-Trichlorobenzene	U	3.1	"							U
1,2,4-Trimethylbenzene	U	2.3	"							U
1,2-Dibromoethane (EDB)	U	3.6	"							U
1,2-Dichlorobenzene	U	2.8	"							U
1,2-Dichloroethane	U	1.9	"							U
1,2-Dichloropropane	U	2.2	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	3.1	"							U
1,3,5-Trimethylbenzene	U	2.2	"							U
1,3-Butadiene	U	2.1	"							U
1,3-Dichlorobenzene	U	2.9	"							U
1,4-Dichlorobenzene	U	2.9	"							U
1,4-Dioxane	U	1.8	"							U
3-Chloropropene	U	3.0	"							U
4-Ethyltoluene	U	4.7	"							U
Acetone	0.73333	1.2	"							Q-2, B-3, J
Acrylonitrile	U	0.96	"							U
Benzene	U	1.5	"							U
Benzyl chloride	U	2.5	"							U
Bromodichloromethane	U	3.3	"							U
Bromoform	U	5.0	"							U
Bromomethane	U	1.8	"							U
Carbon disulfide	U	1.5	"							U
Carbon Tetrachloride	U	2.9	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK1)**

Prepared: 06/11/13 Analyzed: 07/02/13

Chlorobenzene	U	2.2	ug/m3							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.3	"							U
Chloromethane	U	0.96	"							U
cis-1,2-Dichloroethene	U	1.9	"							U
cis-1,3-Dichloropropene	U	2.1	"							U
Cyclohexane	U	1.7	"							U
Dibromochloromethane	U	4.2	"							U
Dichlorodifluoromethane (Freon 12)	U	2.2	"							U
Ethyl Acetate	U	1.8	"							U
Ethyl Benzene	U	2.1	"							U
Heptane	U	2.0	"							U
Hexachlorobutadiene	U	5.0	"							U
Hexane	U	1.7	"							U
Isooctane	U	2.3	"							U
Isopropanol	U	1.2	"							U
Methyl Butyl Ketone	U	2.0	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	2.0	"							U
Methyl T-Butyl Ether (MTBE)	U	1.8	"							U
Methylene Chloride	U	1.6	"							U
o-Xylene	U	2.1	"							U
Styrene	U	2.0	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.2	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.8	"							U
trans-1,2-Dichloroethene	U	1.9	"							U
trans-1,3-Dichloropropene	U	2.2	"							U
Trichloroethene (Trichloroethylene)	U	2.6	"							U
Trichlorofluoromethane (Freon 11)	U	2.6	"							U
Vinyl acetate	U	1.7	"							U
Vinyl bromide	U	2.1	"							U
Vinyl chloride	U	1.2	"							U



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## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK2)**

Prepared: 06/11/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	U	4.2	ug/m3							U
1,1,1-Trichloroethane	U	2.6	"							U
1,1,2,2-Tetrachloroethane	U	3.3	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.6	"							U
1,1,2-Trichloroethane	U	2.6	"							U
1,1-Dichloroethane	U	1.9	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.8	"							U
1,2,4-Trichlorobenzene	U	3.1	"							U
1,2,4-Trimethylbenzene	U	2.3	"							U
1,2-Dibromoethane (EDB)	U	3.6	"							U
1,2-Dichlorobenzene	U	2.8	"							U
1,2-Dichloroethane	U	1.9	"							U
1,2-Dichloropropane	U	2.2	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	3.1	"							U
1,3,5-Trimethylbenzene	U	2.2	"							U
1,3-Butadiene	U	2.1	"							U
1,3-Dichlorobenzene	U	2.9	"							U
1,4-Dichlorobenzene	U	2.9	"							U
1,4-Dioxane	U	1.8	"							U
3-Chloropropene	U	3.0	"							U
4-Ethyltoluene	U	4.7	"							U
Acetone	0.48889	1.2	"						B-3, Q-2, J	
Acrylonitrile	U	0.96	"							U
Benzene	U	1.5	"							U
Benzyl chloride	U	2.5	"							U
Bromodichloromethane	U	3.3	"							U
Bromoform	U	5.0	"							U
Bromomethane	U	1.8	"							U
Carbon disulfide	U	1.5	"							U
Carbon Tetrachloride	U	2.9	"							U
Chlorobenzene	U	2.2	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.3	"							U
Chloromethane	U	0.96	"							U
cis-1,2-Dichloroethene	U	1.9	"							U
cis-1,3-Dichloropropene	U	2.1	"							U
Cyclohexane	U	1.7	"							U
Dibromochloromethane	U	4.2	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK2)**

Prepared: 06/11/13 Analyzed: 07/02/13

Dichlorodifluoromethane (Freon 12)	U	2.2	ug/m3							U
Ethyl Acetate	U	1.8	"							U
Ethyl Benzene	U	2.1	"							U
Heptane	U	2.0	"							U
Hexachlorobutadiene	U	5.0	"							U
Hexane	U	1.7	"							U
Isooctane	U	2.3	"							U
Isopropanol	U	1.2	"							U
Methyl Butyl Ketone	U	2.0	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	2.0	"							U
Methyl T-Butyl Ether (MTBE)	U	1.8	"							U
Methylene Chloride	U	1.6	"							U
o-Xylene	U	2.1	"							U
Styrene	U	2.0	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.2	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.8	"							U
trans-1,2-Dichloroethene	U	1.9	"							U
trans-1,3-Dichloropropene	U	2.2	"							U
Trichloroethene (Trichloroethylene)	U	2.6	"							U
Trichlorofluoromethane (Freon 11)	U	2.6	"							U
Vinyl acetate	U	1.7	"							U
Vinyl bromide	U	2.1	"							U
Vinyl chloride	U	1.2	"							U

**Blank (1307012-BLK3)**

Prepared: 06/11/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3							U
1,1,1-Trichloroethane	U	2.4	"							U
1,1,2,2-Tetrachloroethane	U	3.1	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"							U
1,1,2-Trichloroethane	U	2.5	"							U
1,1-Dichloroethane	U	1.8	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"							U
1,2,4-Trichlorobenzene	U	2.9	"							U
1,2,4-Trimethylbenzene	U	2.2	"							U
1,2-Dibromoethane (EDB)	U	3.4	"							U
1,2-Dichlorobenzene	U	2.6	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK3)**

Prepared: 06/11/13 Analyzed: 07/02/13

1,2-Dichloroethane	U	1.8	ug/m3							U
1,2-Dichloropropane	U	2.1	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	2.9	"							U
1,3,5-Trimethylbenzene	U	2.1	"							U
1,3-Butadiene	U	2.0	"							U
1,3-Dichlorobenzene	U	2.7	"							U
1,4-Dichlorobenzene	U	2.7	"							U
1,4-Dioxane	U	1.7	"							U
3-Chloropropene	U	2.8	"							U
4-Ethyltoluene	U	4.5	"							U
Acetone	U	1.1	"							U
Acrylonitrile	U	0.90	"							U
Benzene	U	1.4	"							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	U	2.8	"							U
Chlorobenzene	U	2.1	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.1	"							U
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U
Dichlorodifluoromethane (Freon 12)	U	2.1	"							U
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	U	1.1	"							U
Methyl Butyl Ketone	U	1.9	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	1.9	"							U
Methyl T-Butyl Ether (MTBE)	U	1.7	"							U
Methylene Chloride	U	1.5	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister****Blank (1307012-BLK3)**

Prepared: 06/11/13 Analyzed: 07/02/13

o-Xylene	U	2.0	ug/m3						U
Styrene	U	1.9	"						U
Tetrachloroethene (Tetrachloroethylene)	U	3.0	"						U
Tetrahydrofuran	U	1.4	"						U
Toluene	U	1.7	"						U
trans-1,2-Dichloroethene	U	1.8	"						U
trans-1,3-Dichloropropene	U	2.1	"						U
Trichloroethene (Trichloroethylene)	U	2.4	"						U
Trichlorofluoromethane (Freon 11)	U	2.5	"						U
Vinyl acetate	U	1.6	"						U
Vinyl bromide	U	2.0	"						U
Vinyl chloride	U	1.2	"						U

**LCS (1307012-BS1)**

Prepared: 07/01/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	9.7700	ug/m3	9.4000	104	72-140				
1,1,1-Trichloroethane	6.1200	"	5.8000	106	68-144				
1,1,2,2-Tetrachloroethane	7.0400	"	7.3000	96.4	64-146				
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	8.5300	"	8.0000	107	73-140				
1,1,2-Trichloroethane	6.0100	"	5.8000	104	71-142				
1,1-Dichloroethane	4.3100	"	4.3000	100	72-136				
1,1-Dichloroethene (1,1-Dichloroethylene)	4.5100	"	4.1000	110	70-140				
1,2,4-Trichlorobenzene	5.3500	"	7.0000	76.4	15-159				QC-3, QC-5
1,2,4-Trimethylbenzene	5.7900	"	5.2000	111	66-136				
1,2-Dibromoethane (EDB)	8.5100	"	8.2000	104	70-138				
1,2-Dichlorobenzene	6.6900	"	6.3000	106	68-137				
1,2-Dichloroethane	3.9800	"	4.3000	92.6	71-137				
1,2-Dichloropropane	4.9900	"	4.9000	102	69-140				
1,2-Dichlorotetrafluoroethane (Freon 114)	7.5800	"	7.0000	108	69-147				
1,3,5-Trimethylbenzene	5.4900	"	5.1000	108	66-141				
1,3-Butadiene	5.2400	"	4.8000	109	62-151				
1,3-Dichlorobenzene	6.6000	"	6.4000	103	69-136				
1,4-Dichlorobenzene	6.6700	"	6.4000	104	68-133				
1,4-Dioxane	4.4400	"	4.0000	111	37-149				QC-5
3-Chloropropene	6.9300	"	6.7000	103	67-140				
4-Ethyltoluene	11.690	"	10.700	109	65-146				
Acetone	3.0400	"	2.6000	117	71-154				
Acrylonitrile	2.6700	"	2.1000	127	59-147				



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## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307012 - V TO-15 Air Canister****LCS (1307012-BS1)**

Prepared: 07/01/13 Analyzed: 07/02/13

Benzene	3.1100		ug/m3	3.4000		91.5	70-140		
Benzyl chloride	5.0300		"	5.7000		88.2	46-145		QC-5
Bromodichloromethane	6.9800		"	7.4000		94.3	66-143		
Bromoform	11.580		"	11.400		102	14-168		
Bromomethane	4.7200		"	4.1000		115	52-169		
Carbon disulfide	3.3800		"	3.4000		99.4	71-139		
Carbon Tetrachloride	7.0400		"	6.6000		107	70-143		
Chlorobenzene	4.8300		"	5.0000		96.6	73-136		
Chloroethane	3.2300		"	2.8000		115	61-168		
Chloroform	4.7300		"	5.1000		92.7	70-141		
Chloromethane	2.3500		"	2.2000		107	59-155		
cis-1,2-Dichloroethene	3.8600		"	4.2000		91.9	70-136		
cis-1,3-Dichloropropene	4.7400		"	4.8000		98.7	67-139		
Cyclohexane	4.4500		"	3.8000		117	70-135		
Dibromochloromethane	9.9700		"	9.4000		106	67-139		
Dichlorodifluoromethane (Freon 12)	5.1800		"	5.0000		104	73-143		
Ethyl Acetate	4.3800		"	4.0000		110	65-141		
Ethyl Benzene	4.7900		"	4.6000		104	70-137		
Heptane	4.8900		"	4.5000		109	65-140		
Hexachlorobutadiene	10.430		"	11.200		93.1	34-171		QC-5
Hexane	4.4100		"	3.9000		113	71-133		
Isooctane	5.9100		"	5.1000		116	69-137		
Isopropanol	1.9600		"	2.7000		72.6	10-171		QC-5
Methyl Butyl Ketone	5.4300		"	4.5000		121	30-161		
Methyl Ethyl Ketone	3.6100		"	3.2000		113	65-141		
Methyl Isobutyl Ketone	5.3800		"	4.5000		120	60-150		
Methyl T-Butyl Ether (MTBE)	4.8700		"	4.1000		119	73-138		
Methylene Chloride	3.8900		"	3.6000		108	70-142		
o-Xylene	4.9700		"	4.7000		106	72-136		
Styrene	4.5400		"	4.5000		101	70-136		
Tetrachloroethene (Tetrachloroethylene)	7.4300		"	7.2000		103	68-148		
Tetrahydrofuran	3.9000		"	3.2000		122	59-149		
Toluene	4.1600		"	4.0000		104	72-138		
trans-1,2-Dichloroethene	4.2400		"	4.2000		101	73-136		
trans-1,3-Dichloropropene	5.3000		"	5.0000		106	66-141		
Trichloroethene (Trichloroethylene)	5.4100		"	5.8000		93.3	69-137		
Trichlorofluoromethane (Freon 11)	6.0300		"	5.9000		102	74-141		
Vinyl acetate	4.5500		"	3.9000		117	57-149		
Vinyl bromide	5.2400		"	4.8000		109	69-137		
Vinyl chloride	3.1600		"	2.7000		117	62-151		



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister**

LCS (1307012-BS1)

Prepared: 07/01/13 Analyzed: 07/02/13

**Duplicate (1307012-DUP1)****Source: E132402-12**

Prepared: 07/01/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	U	40	ug/m3		U			20	U
1,1,1-Trichloroethane	1.6958	25	"		1.6958		0.00	20	U
1,1,2,2-Tetrachloroethane	U	31	"		U			20	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	34	"		U			20	U
1,1,2-Trichloroethane	U	25	"		U			20	U
1,1-Dichloroethane	U	18	"		U			20	U
1,1-Dichloroethylene (1,1-Dichloroethylene)	U	17	"		U			20	U
1,2,4-Trichlorobenzene	U	29	"		U			20	J, QC-3, QC-5, U
1,2,4-Trimethylbenzene	U	22	"		U			20	U
1,2-Dibromoethane (EDB)	U	35	"		U			20	U
1,2-Dichlorobenzene	U	27	"		U			20	U
1,2-Dichloroethane	U	18	"		U			20	U
1,2-Dichloropropane	U	21	"		U			20	U
1,2-Dichlorotetrafluoroethane (Freon 114)	67.407	30	"		67.619		0.314	20	
1,3,5-Trimethylbenzene	U	21	"		U			20	U
1,3-Butadiene	U	20	"		U			20	U
1,3-Dichlorobenzene	U	27	"		U			20	U
1,4-Dichlorobenzene	U	27	"		U			20	U
1,4-Dioxane	U	17	"		U			20	J, QC-5, U
3-Chloropropene	U	28	"		U			20	U
4-Ethyltoluene	U	45	"		U			20	U
Acetone	U	11	"		U			20	U
Acrylonitrile	U	9.1	"		U			20	U
Benzene	U	14	"		U			20	U
Benzyl chloride	U	24	"		U			20	J, QC-5, U
Bromodichloromethane	U	31	"		U			20	U
Bromoform	U	48	"		U			20	U
Bromomethane	U	17	"		U			20	U
Carbon disulfide	19.713	14	"		19.501		1.08	12	
Carbon Tetrachloride	U	28	"		U			20	U
Chlorobenzene	U	21	"		U			20	U
Chloroethane	U	12	"		U			20	U
Chloroform	8.9028	22	"		9.5387		6.90	20	Q-2, XD-1, J



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## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307012 - V TO-15 Air Canister**

Duplicate (1307012-DUP1)	Source: E132402-12			Prepared: 07/01/13 Analyzed: 07/02/13						
Chloromethane	U	9.1	ug/m3		U			20	20	U
cis-1,2-Dichloroethene	U	18	"		U			20	20	U
cis-1,3-Dichloropropene	U	20	"		U			20	20	U
Cyclohexane	U	16	"		U			20	20	U
Dibromochloromethane	U	40	"		U			20	20	U
Dichlorodifluoromethane (Freon 12)	10.811	21	"		10.811			0.00	20	Q-2, XD-1, J
Ethyl Acetate	U	17	"		U			20	20	U
Ethyl Benzene	U	20	"		U			20	20	U
Heptane	U	19	"		U			20	20	U
Hexachlorobutadiene	U	47	"		U			20	20	J, QC-5, U
Hexane	U	16	"		U			20	20	U
Isooctane	U	22	"		U			20	20	U
Isopropanol	15.686	11	"		16.322			3.97	20	J, QC-5
Methyl Butyl Ketone	U	19	"		U			20	20	U
Methyl Ethyl Ketone	U	14	"		U			20	20	U
Methyl Isobutyl Ketone	U	19	"		U			20	20	U
Methyl T-Butyl Ether (MTBE)	U	18	"		U			20	20	U
Methylene Chloride	U	15	"		U			20	20	U
o-Xylene	U	20	"		U			20	20	U
Styrene	U	19	"		U			20	20	U
Tetrachloroethene (Tetrachloroethylene)	566.18	31	"		560.24			1.05	18.2	
Tetrahydrofuran	U	14	"		U			20	20	U
Toluene	U	17	"		U			20	20	U
trans-1,2-Dichloroethene	U	18	"		U			20	20	U
trans-1,3-Dichloropropene	U	21	"		U			20	20	U
Trichloroethene (Trichloroethylene)	U	25	"		U			20	20	U
Trichlorofluoromethane (Freon 11)	U	25	"		1.4838			20	20	U
Vinyl acetate	U	16	"		U			20	20	U
Vinyl bromide	U	20	"		U			20	20	U
Vinyl chloride	U	12	"		U			20	20	U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307012 - V TO-15 Air Canister****MRL Verification (1307012-PS1)**

Prepared: 07/01/13 Analyzed: 07/02/13

**EPA TO-15**

(m- and/or p-)Xylene	2.0600		ug/m3	1.8700		110	52-160		MRL-5
1,1,1-Trichloroethane	1.3200		"	1.1600		114	48-164		MRL-5
1,1,2,2-Tetrachloroethane	1.5600		"	1.4700		106	44-166		MRL-5
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.7200		"	1.6100		107	53-160		MRL-5
1,1,2-Trichloroethane	1.3100		"	1.1700		112	51-162		MRL-5
1,1-Dichloroethane	0.84000		"	0.86000		97.7	52-156		MRL-5
1,1-Dichloroethene (1,1-Dichloroethylene)	0.92000		"	0.82000		112	50-160		MRL-5
1,2,4-Trichlorobenzene	2.1000		"	1.3900		151	10-179		MRL-5, QC-3, QC-5
1,2,4-Trimethylbenzene	1.1100		"	1.0300		108	46-156		MRL-5
1,2-Dibromoethane (EDB)	1.9800		"	1.6400		121	50-158		MRL-5
1,2-Dichlorobenzene	1.4900		"	1.2600		118	48-157		MRL-5
1,2-Dichloroethane	0.96000		"	0.87000		110	51-157		MRL-5
1,2-Dichloropropane	1.0700		"	0.99000		108	49-160		MRL-5
1,2-Dichlorotetrafluoroethane (Freon 114)	1.5400		"	1.4000		110	49-167		MRL-5
1,3,5-Trimethylbenzene	1.1100		"	1.0100		110	46-161		MRL-5
1,3-Butadiene	1.1200		"	0.96000		117	42-171		MRL-5
1,3-Dichlorobenzene	1.4900		"	1.2900		116	49-156		MRL-5
1,4-Dichlorobenzene	1.5200		"	1.2900		118	48-153		MRL-5
1,4-Dioxane	0.91000		"	0.79000		115	17-169		MRL-5, QC-5
3-Chloropropene	1.3300		"	1.3300		100	47-160		MRL-5
4-Ethyltoluene	2.3000		"	2.1300		108	45-166		MRL-5
Acetone	0.61000		"	0.52000		117	51-174		MRL-5
Acrylonitrile	0.48000		"	0.43000		112	39-167		MRL-5
Benzene	0.66000		"	0.68000		97.1	50-160		MRL-5
Benzyl chloride	1.0100		"	1.1400		88.6	26-165		MRL-5, QC-5
Bromodichloromethane	1.6100		"	1.4700		110	46-163		MRL-5
Bromoform	2.3600		"	2.2700		104	10-188		MRL-5
Bromomethane	0.97000		"	0.82000		118	32-189		MRL-5
Carbon disulfide	0.68000		"	0.68000		100	51-159		MRL-5
Carbon Tetrachloride	1.5200		"	1.3200		115	50-163		MRL-5
Chlorobenzene	1.1000		"	0.99000		111	53-156		MRL-5
Chloroethane	0.61000		"	0.56000		109	41-188		MRL-5
Chloroform	1.0900		"	1.0200		107	50-161		MRL-5
Chloromethane	0.49000		"	0.43000		114	39-175		MRL-5
cis-1,2-Dichloroethene	0.84000		"	0.85000		98.8	50-156		MRL-5
cis-1,3-Dichloropropene	1.0400		"	0.96000		108	47-159		MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307012 - V TO-15 Air Canister****MRL Verification (1307012-PS1)**

Prepared: 07/01/13 Analyzed: 07/02/13

Cyclohexane	0.92000		ug/m3	0.76000		121	50-155		MRL-5
Dibromochloromethane	2.1300		"	1.8700		114	47-159		MRL-5
Dichlorodifluoromethane (Freon 12)	1.0700		"	1.0000		107	53-163		MRL-5
Ethyl Acetate	0.84000		"	0.79000		106	45-161		MRL-5
Ethyl Benzene	1.0100		"	0.93000		109	50-157		MRL-5
Heptane	1.0700		"	0.90000		119	45-160		MRL-5
Hexachlorobutadiene	3.3400		"	2.2400		149	14-191		MRL-5, QC-5
Hexane	0.85000		"	0.77000		110	51-153		MRL-5
Isooctane	1.1600		"	1.0300		113	49-157		MRL-5
Isopropanol	0.78000		"	0.54000		144	10-191		QC-5, MRL-5
Methyl Butyl Ketone	1.0700		"	0.90000		119	10-181		MRL-5
Methyl Ethyl Ketone	0.68000		"	0.65000		105	45-161		MRL-5
Methyl Isobutyl Ketone	1.0400		"	0.90000		116	40-170		MRL-5
Methyl T-Butyl Ether (MTBE)	0.96000		"	0.83000		116	53-158		MRL-5
Methylene Chloride	0.82000		"	0.73000		112	50-162		MRL-5
o-Xylene	1.0100		"	0.94000		107	52-156		MRL-5
Styrene	0.88000		"	0.90000		97.8	50-156		MRL-5
Tetrachloroethene (Tetrachloroethylene)	1.8200		"	1.4400		126	48-168		MRL-5
Tetrahydrofuran	0.80000		"	0.65000		123	39-169		MRL-5
Toluene	0.95000		"	0.81000		117	52-158		MRL-5
trans-1,2-Dichloroethene	0.84000		"	0.84000		100	53-156		MRL-5
trans-1,3-Dichloropropene	1.1200		"	1.0000		112	46-161		MRL-5
Trichloroethene (Trichloroethylene)	1.3600		"	1.1600		117	49-157		MRL-5
Trichlorofluoromethane (Freon 11)	1.2700		"	1.1800		108	54-161		MRL-5
Vinyl acetate	0.86000		"	0.77000		112	37-169		MRL-5
Vinyl bromide	1.0500		"	0.96000		109	49-157		MRL-5
Vinyl chloride	0.63000		"	0.55000		115	42-171		MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK1)**

Prepared: 06/11/13 Analyzed: 07/03/13

**EPA TO-15**

(m- and/or p-)Xylene	U	4.2	ug/m3							U
1,1,1-Trichloroethane	U	2.6	"							U
1,1,2,2-Tetrachloroethane	U	3.3	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.6	"							U
1,1,2-Trichloroethane	U	2.6	"							U
1,1-Dichloroethane	U	1.9	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.8	"							U
1,2,4-Trichlorobenzene	U	3.1	"							U
1,2,4-Trimethylbenzene	U	2.3	"							U
1,2-Dibromoethane (EDB)	U	3.6	"							U
1,2-Dichlorobenzene	U	2.8	"							U
1,2-Dichloroethane	U	1.9	"							U
1,2-Dichloropropane	U	2.2	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	3.1	"							U
1,3,5-Trimethylbenzene	U	2.2	"							U
1,3-Butadiene	U	2.1	"							U
1,3-Dichlorobenzene	U	2.9	"							U
1,4-Dichlorobenzene	U	2.9	"							U
1,4-Dioxane	U	1.8	"							U
3-Chloropropene	U	3.0	"							U
4-Ethyltoluene	U	4.7	"							U
Acetone	0.57778	1.2	"						B-3, Q-2, J	
Acrylonitrile	U	0.96	"							U
Benzene	U	1.5	"							U
Benzyl chloride	U	2.5	"							U
Bromodichloromethane	U	3.3	"							U
Bromoform	U	5.0	"							U
Bromomethane	U	1.8	"							U
Carbon disulfide	U	1.5	"							U
Carbon Tetrachloride	U	2.9	"							U
Chlorobenzene	U	2.2	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.3	"							U
Chloromethane	U	0.96	"							U
cis-1,2-Dichloroethene	U	1.9	"							U
cis-1,3-Dichloropropene	U	2.1	"							U
Cyclohexane	U	1.7	"							U
Dibromochloromethane	U	4.2	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK1)**

Prepared: 06/11/13 Analyzed: 07/03/13

Dichlorodifluoromethane (Freon 12)	U	2.2	ug/m3							U
Ethyl Acetate	U	1.8	"							U
Ethyl Benzene	U	2.1	"							U
Heptane	U	2.0	"							U
Hexachlorobutadiene	U	5.0	"							U
Hexane	U	1.7	"							U
Isooctane	U	2.3	"							U
Isopropanol	U	1.2	"							U
Methyl Butyl Ketone	U	2.0	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	2.0	"							U
Methyl T-Butyl Ether (MTBE)	U	1.8	"							U
Methylene Chloride	U	1.6	"							U
o-Xylene	U	2.1	"							U
Styrene	U	2.0	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.2	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.8	"							U
trans-1,2-Dichloroethene	U	1.9	"							U
trans-1,3-Dichloropropene	U	2.2	"							U
Trichloroethene (Trichloroethylene)	U	2.6	"							U
Trichlorofluoromethane (Freon 11)	U	2.6	"							U
Vinyl acetate	U	1.7	"							U
Vinyl bromide	U	2.1	"							U
Vinyl chloride	U	1.2	"							U

**Blank (1307020-BLK2)**

Prepared: 06/11/13 Analyzed: 07/04/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3							U
1,1,1-Trichloroethane	0.29371	2.4	"						B-3, Q-2, J	
1,1,2,2-Tetrachloroethane	U	3.1	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"							U
1,1,2-Trichloroethane	U	2.5	"							U
1,1-Dichloroethane	U	1.8	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"							U
1,2,4-Trichlorobenzene	U	2.9	"							U
1,2,4-Trimethylbenzene	U	2.2	"							U
1,2-Dibromoethane (EDB)	U	3.4	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK2)**

Prepared: 06/11/13 Analyzed: 07/04/13

1,2-Dichlorobenzene	U	2.6	ug/m3							U
1,2-Dichloroethane	U	1.8	"							U
1,2-Dichloropropane	U	2.1	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	0.46154	2.9	"							B-3, Q-2, J
1,3,5-Trimethylbenzene	U	2.1	"							U
1,3-Butadiene	U	2.0	"							U
1,3-Dichlorobenzene	U	2.7	"							U
1,4-Dichlorobenzene	U	2.7	"							U
1,4-Dioxane	U	1.7	"							U
3-Chloropropene	U	2.8	"							U
4-Ethyltoluene	U	4.5	"							U
Acetone	0.69231	1.1	"							B-3, Q-2, J
Acrylonitrile	U	0.90	"							U
Benzene	U	1.4	"							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	11.706	2.8	"							B-3
Chlorobenzene	U	2.1	"							U
Chloroethane	U	1.2	"							U
Chloroform	0.37762	2.1	"							B-3, Q-2, J
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U
Dichlorodifluoromethane (Freon 12)	0.12587	2.1	"							B-3, Q-2, J
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	0.23077	1.1	"							B-3, Q-2, J
Methyl Butyl Ketone	U	1.9	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK2)**

Prepared: 06/11/13 Analyzed: 07/04/13

Methyl Ethyl Ketone	U	1.4	ug/m3						U
Methyl Isobutyl Ketone	U	1.9	"						U
Methyl T-Butyl Ether (MTBE)	U	1.7	"						U
Methylene Chloride	U	1.5	"						U
o-Xylene	U	2.0	"						U
Styrene	U	1.9	"						U
Tetrachloroethene (Tetrachloroethylene)	0.41958	3.0	"					B-3, Q-2, J	
Tetrahydrofuran	U	1.4	"						U
Toluene	U	1.7	"						U
trans-1,2-Dichloroethene	U	1.8	"						U
trans-1,3-Dichloropropene	U	2.1	"						U
Trichloroethene (Trichloroethylene)	U	2.4	"						U
Trichlorofluoromethane (Freon 11)	U	2.5	"						U
Vinyl acetate	U	1.6	"						U
Vinyl bromide	U	2.0	"						U
Vinyl chloride	U	1.2	"						U

**Blank (1307020-BLK3)**

Prepared: 07/01/13 Analyzed: 07/03/13

**EPA TO-15**

## (m- and/or p-)Xylene

U	4.2	ug/m3			U
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## 1,1,1-Trichloroethane

U	2.6	"			U
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## 1,1,2,2-Tetrachloroethane

U	3.3	"			U
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## 1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)

U	3.6	"			U
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## 1,1,2-Trichloroethane

U	2.6	"			U
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## 1,1-Dichloroethane

U	1.9	"			U
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## 1,1-Dichloroethene (1,1-Dichloroethylene)

U	1.8	"			U
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## 1,2,4-Trichlorobenzene

U	3.1	"			U
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## 1,2,4-Trimethylbenzene

U	2.3	"			U
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## 1,2-Dibromoethane (EDB)

U	3.7	"			U
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## 1,2-Dichlorobenzene

U	2.8	"			U
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## 1,2-Dichloroethane

U	1.9	"			U
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## 1,2-Dichloropropane

U	2.2	"			U
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## 1,2-Dichlorotetrafluoroethane (Freon 114)

U	3.1	"			U
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## 1,3,5-Trimethylbenzene

U	2.3	"			U
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## 1,3-Butadiene

U	2.1	"			U
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## 1,3-Dichlorobenzene

U	2.9	"			U
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## 1,4-Dichlorobenzene

U	2.9	"			U
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## 1,4-Dioxane

U	1.8	"			U
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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK3)**

Prepared: 07/01/13 Analyzed: 07/03/13

3-Chloropropene	U	3.0	ug/m3							U
4-Ethyltoluene	U	4.7	"							U
Acetone	U	1.2	"							U
Acrylonitrile	U	0.96	"							U
Benzene	U	1.5	"							U
Benzyl chloride	U	2.5	"							U
Bromodichloromethane	U	3.3	"							U
Bromoform	U	5.1	"							U
Bromomethane	U	1.8	"							U
Carbon disulfide	U	1.5	"							U
Carbon Tetrachloride	U	2.9	"							U
Chlorobenzene	U	2.2	"							U
Chloroethane	U	1.2	"							U
Chloroform	U	2.3	"							U
Chloromethane	U	0.96	"							U
cis-1,2-Dichloroethene	U	1.9	"							U
cis-1,3-Dichloropropene	U	2.1	"							U
Cyclohexane	U	1.7	"							U
Dibromochloromethane	U	4.2	"							U
Dichlorodifluoromethane (Freon 12)	U	2.2	"							U
Ethyl Acetate	U	1.8	"							U
Ethyl Benzene	U	2.1	"							U
Heptane	U	2.0	"							U
Hexachlorobutadiene	U	5.0	"							U
Hexane	U	1.7	"							U
Isooctane	U	2.3	"							U
Isopropanol	U	1.2	"							U
Methyl Butyl Ketone	U	2.0	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	2.0	"							U
Methyl T-Butyl Ether (MTBE)	U	1.9	"							U
Methylene Chloride	U	1.6	"							U
o-Xylene	U	2.1	"							U
Styrene	U	2.0	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.2	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.8	"							U
trans-1,2-Dichloroethene	U	1.9	"							U
trans-1,3-Dichloropropene	U	2.2	"							U
Trichloroethene (Trichloroethylene)	U	2.6	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK3)**

Prepared: 07/01/13 Analyzed: 07/03/13

Trichlorofluoromethane (Freon 11)	U	2.6	ug/m3							U
Vinyl acetate	U	1.7	"							U
Vinyl bromide	U	2.1	"							U
Vinyl chloride	U	1.2	"							U

**Blank (1307020-BLK5)**

Prepared: 06/11/13 Analyzed: 07/04/13

**EPA TO-15**

(m- and/or p-)Xylene	U	3.9	ug/m3							U
1,1,1-Trichloroethane	U	2.4	"							U
1,1,2,2-Tetrachloroethane	U	3.1	"							U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	U	3.4	"							U
1,1,2-Trichloroethane	U	2.5	"							U
1,1-Dichloroethane	U	1.8	"							U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.7	"							U
1,2,4-Trichlorobenzene	U	2.9	"							U
1,2,4-Trimethylbenzene	U	2.2	"							U
1,2-Dibromoethane (EDB)	U	3.4	"							U
1,2-Dichlorobenzene	U	2.6	"							U
1,2-Dichloroethane	U	1.8	"							U
1,2-Dichloropropane	U	2.1	"							U
1,2-Dichlorotetrafluoroethane (Freon 114)	U	2.9	"							U
1,3,5-Trimethylbenzene	U	2.1	"							U
1,3-Butadiene	U	2.0	"							U
1,3-Dichlorobenzene	U	2.7	"							U
1,4-Dichlorobenzene	U	2.7	"							U
1,4-Dioxane	U	1.7	"							U
3-Chloropropene	U	2.8	"							U
4-Ethyltoluene	U	4.5	"							U
Acetone	0.14685	1.1	"							U
Acrylonitrile	U	0.90	"							U
Benzene	U	1.4	"							U
Benzyl chloride	U	2.4	"							U
Bromodichloromethane	U	3.1	"							U
Bromoform	U	4.8	"							U
Bromomethane	U	1.7	"							U
Carbon disulfide	U	1.4	"							U
Carbon Tetrachloride	0.25175	2.8	"							B-3, Q-2, J
Chlorobenzene	U	2.1	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Blank (1307020-BLK5)**

Prepared: 06/11/13 Analyzed: 07/04/13

Chloroethane	U	1.2	ug/m3							U
Chloroform	U	2.1	"							U
Chloromethane	U	0.90	"							U
cis-1,2-Dichloroethene	U	1.8	"							U
cis-1,3-Dichloropropene	U	2.0	"							U
Cyclohexane	U	1.6	"							U
Dibromochloromethane	U	3.9	"							U
Dichlorodifluoromethane (Freon 12)	U	2.1	"							U
Ethyl Acetate	U	1.7	"							U
Ethyl Benzene	U	2.0	"							U
Heptane	U	1.9	"							U
Hexachlorobutadiene	U	4.7	"							U
Hexane	U	1.6	"							U
Isooctane	U	2.2	"							U
Isopropanol	U	1.1	"							U
Methyl Butyl Ketone	U	1.9	"							U
Methyl Ethyl Ketone	U	1.4	"							U
Methyl Isobutyl Ketone	U	1.9	"							U
Methyl T-Butyl Ether (MTBE)	U	1.7	"							U
Methylene Chloride	U	1.5	"							U
o-Xylene	U	2.0	"							U
Styrene	U	1.9	"							U
Tetrachloroethene (Tetrachloroethylene)	U	3.0	"							U
Tetrahydrofuran	U	1.4	"							U
Toluene	U	1.7	"							U
trans-1,2-Dichloroethene	U	1.8	"							U
trans-1,3-Dichloropropene	U	2.1	"							U
Trichloroethene (Trichloroethylene)	U	2.4	"							U
Trichlorofluoromethane (Freon 11)	U	2.5	"							U
Vinyl acetate	U	1.6	"							U
Vinyl bromide	U	2.0	"							U
Vinyl chloride	U	1.2	"							U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****LCS (1307020-BS1)**

Prepared &amp; Analyzed: 07/03/13

**EPA TO-15**

(m- and/or p-)Xylene	8.4000		ug/m3	9.4000		89.4	72-140			
1,1,1-Trichloroethane	4.8700		"	5.8000		84.0	68-144			
1,1,2,2-Tetrachloroethane	6.3100		"	7.3000		86.4	64-146			
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	6.7800		"	8.0000		84.8	73-140			
1,1,2-Trichloroethane	4.9700		"	5.8000		85.7	71-142			
1,1-Dichloroethane	3.6800		"	4.3000		85.6	72-136			
1,1-Dichloroethene (1,1-Dichloroethylene)	3.4200		"	4.1000		83.4	70-140			
1,2,4-Trichlorobenzene	2.8500		"	7.0000		40.7	15-159			QC-3, QC-5
1,2,4-Trimethylbenzene	4.2300		"	5.2000		81.3	66-136			
1,2-Dibromoethane (EDB)	6.8800		"	8.2000		83.9	70-138			
1,2-Dichlorobenzene	4.9700		"	6.3000		78.9	68-137			
1,2-Dichloroethane	3.7200		"	4.3000		86.5	71-137			
1,2-Dichloropropane	4.4600		"	4.9000		91.0	69-140			
1,2-Dichlorotetrafluoroethane (Freon 114)	5.6900		"	7.0000		81.3	69-147			
1,3,5-Trimethylbenzene	4.3400		"	5.1000		85.1	66-141			
1,3-Butadiene	3.7900		"	4.8000		79.0	62-151			
1,3-Dichlorobenzene	5.0700		"	6.4000		79.2	69-136			
1,4-Dichlorobenzene	4.9000		"	6.4000		76.6	68-133			
1,4-Dioxane	3.3100		"	4.0000		82.8	37-149			QC-5
3-Chloropropene	5.6500		"	6.7000		84.3	67-140			
4-Ethyltoluene	9.2100		"	10.700		86.1	65-146			
Acetone	2.2900		"	2.6000		88.1	71-154			
Acrylonitrile	1.7400		"	2.1000		82.9	59-147			
Benzene	3.0300		"	3.4000		89.1	70-140			
Benzyl chloride	3.6400		"	5.7000		63.9	46-145			QC-5
Bromodichloromethane	6.1800		"	7.4000		83.5	66-143			
Bromoform	9.4400		"	11.400		82.8	14-168			
Bromomethane	3.4400		"	4.1000		83.9	52-169			
Carbon disulfide	2.8300		"	3.4000		83.2	71-139			
Carbon Tetrachloride	5.5500		"	6.6000		84.1	70-143			
Chlorobenzene	4.2500		"	5.0000		85.0	73-136			
Chloroethane	2.3200		"	2.8000		82.9	61-168			
Chloroform	4.4000		"	5.1000		86.3	70-141			
Chloromethane	1.6900		"	2.2000		76.8	59-155			
cis-1,2-Dichloroethene	3.5900		"	4.2000		85.5	70-136			
cis-1,3-Dichloropropene	3.8100		"	4.8000		79.4	67-139			
Cyclohexane	3.2300		"	3.8000		85.0	70-135			
Dibromochloromethane	7.8200		"	9.4000		83.2	67-139			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****LCS (1307020-BS1)**

	Prepared & Analyzed: 07/03/13						
Dichlorodifluoromethane (Freon 12)	4.2700		ug/m3	5.0000	85.4	73-143	
Ethyl Acetate	3.2300		"	4.0000	80.8	65-141	
Ethyl Benzene	4.0300		"	4.6000	87.6	70-137	
Heptane	3.7800		"	4.5000	84.0	65-140	
Hexachlorobutadiene	6.3700		"	11.200	56.9	34-171	QC-5
Hexane	3.2600		"	3.9000	83.6	71-133	
Isooctane	4.3900		"	5.1000	86.1	69-137	
Isopropanol	1.1400		"	2.7000	42.2	10-171	QC-5
Methyl Butyl Ketone	3.5700		"	4.5000	79.3	30-161	
Methyl Ethyl Ketone	2.6100		"	3.2000	81.6	65-141	
Methyl Isobutyl Ketone	3.9000		"	4.5000	86.7	60-150	
Methyl T-Butyl Ether (MTBE)	3.3900		"	4.1000	82.7	73-138	
Methylene Chloride	3.0300		"	3.6000	84.2	70-142	
o-Xylene	4.0800		"	4.7000	86.8	72-136	
Styrene	3.8100		"	4.5000	84.7	70-136	
Tetrachloroethene (Tetrachloroethylene)	6.1100		"	7.2000	84.9	68-148	
Tetrahydrofuran	2.7300		"	3.2000	85.3	59-149	
Toluene	3.4600		"	4.0000	86.5	72-138	
trans-1,2-Dichloroethene	3.5100		"	4.2000	83.6	73-136	
trans-1,3-Dichloropropene	3.9700		"	5.0000	79.4	66-141	
Trichloroethene (Trichloroethylene)	5.0100		"	5.8000	86.4	69-137	
Trichlorofluoromethane (Freon 11)	4.8300		"	5.9000	81.9	74-141	
Vinyl acetate	3.1800		"	3.9000	81.5	57-149	
Vinyl bromide	3.9100		"	4.8000	81.5	69-137	
Vinyl chloride	2.1200		"	2.7000	78.5	62-151	

**Duplicate (1307020-DUP2)**

Source: E132402-10RE1 Prepared: 07/03/13 Analyzed: 07/04/13

**EPA TO-15**

(m- and/or p-)Xylene	U	4.0	ug/m3	U		20	U
1,1,1-Trichloroethane	0.83571	2.5	"	0.83571	0.00	20	Q-2, XD-1, J
1,1,2,2-Tetrachloroethane	U	3.2	"	U		20	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.57857	3.4	"	0.55714	3.77	20	Q-2, XD-1, J
1,1,2-Trichloroethane	U	2.5	"	U		20	U
1,1-Dichloroethane	U	1.8	"	U		20	U
1,1-Dichloroethene (1,1-Dichloroethylene)	U	1.8	"	U		20	U
1,2,4-Trichlorobenzene	U	3.0	"	U		20	J, QC-1, QC-3, QC-5, U
1,2,4-Trimethylbenzene	U	2.2	"	U		20	U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307020 - V TO-15 Air Canister**

Duplicate (1307020-DUP2)	Source: E132402-10RE1			Prepared: 07/03/13 Analyzed: 07/04/13					
1,2-Dibromoethane (EDB)	U	3.5	ug/m3		U			20	U
1,2-Dichlorobenzene	U	2.7	"		U			20	U
1,2-Dichloroethane	U	1.9	"		U			20	U
1,2-Dichloropropane	U	2.1	"		U			20	U
1,2-Dichlorotetrafluoroethane (Freon 114)	0.25714	3.0	"		0.51429			66.7	20 Q-2, XD-1, J
1,3,5-Trimethylbenzene	U	2.2	"		U			20	U
1,3-Butadiene	U	2.1	"		U			20	U
1,3-Dichlorobenzene	U	2.8	"		U			20	U
1,4-Dichlorobenzene	U	2.8	"		U			20	U
1,4-Dioxane	U	1.7	"		U			20	J, QC-5, U
3-Chloropropene	U	2.8	"		U			20	U
4-Ethyltoluene	U	4.6	"		U			20	U
Acetone	4.3929	1.1	"		U			20	
Acrylonitrile	U	0.92	"		U			20	U
Benzene	U	1.5	"		U			20	U
Benzyl chloride	U	2.4	"		U			20	J, QC-1, QC-5, U
Bromodichloromethane	U	3.2	"		U			20	U
Bromoform	U	4.9	"		U			20	U
Bromomethane	U	1.8	"		U			20	U
Carbon disulfide	0.42857	1.5	"		0.42857			0.00	12 Q-2, XD-1, J
Carbon Tetrachloride	0.45000	2.8	"		3.9429			159	20 Q-2, XD-1, J
Chlorobenzene	U	2.1	"		U			20	U
Chloroethane	U	1.2	"		U			20	U
Chloroform	0.62143	2.2	"		0.77143			21.5	20 Q-2, XD-1, J
Chloromethane	U	0.92	"		U			20	U
cis-1,2-Dichloroethene	U	1.8	"		U			20	U
cis-1,3-Dichloropropene	U	2.1	"		U			20	U
Cyclohexane	U	1.6	"		U			20	U
Dibromochloromethane	U	4.0	"		U			20	U
Dichlorodifluoromethane (Freon 12)	2.9143	2.1	"		3.1071			6.41	20
Ethyl Acetate	U	1.7	"		U			20	U
Ethyl Benzene	U	2.0	"		U			20	U
Heptane	U	1.9	"		U			20	U
Hexachlorobutadiene	U	4.8	"		U			20	J, QC-1, QC-5, U
Hexane	U	1.6	"		U			20	U
Isooctane	U	2.2	"		U			20	U



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

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D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****Duplicate (1307020-DUP2)****Source: E132402-10RE1**

Prepared: 07/03/13 Analyzed: 07/04/13

Isopropanol	0.12857	1.2	ug/m3		U			20	QC-1, QC-5, XD-1, J
Methyl Butyl Ketone	U	1.9	"		U			20	U
Methyl Ethyl Ketone	U	1.4	"		0.70714			20	U
Methyl Isobutyl Ketone	U	1.9	"		U			20	U
Methyl T-Butyl Ether (MTBE)	U	1.8	"		U			20	U
Methylene Chloride	U	1.6	"		U			20	U
o-Xylene	U	2.0	"		U			20	U
Styrene	U	1.9	"		U			20	U
Tetrachloroethene (Tetrachloroethylene)	5.6571	3.1	"		5.5286			2.30	18.2
Tetrahydrofuran	U	1.4	"		U			20	U
Toluene	U	1.7	"		U			20	U
trans-1,2-Dichloroethene	U	1.8	"		U			20	U
trans-1,3-Dichloropropene	U	2.1	"		U			20	U
Trichloroethene (Trichloroethylene)	U	2.5	"		U			20	U
Trichlorofluoromethane (Freon 11)	1.6714	2.5	"		1.6500			1.29	20
Vinyl acetate	U	1.6	"		U			20	Q-2, XD-1, J
Vinyl bromide	U	2.1	"		U			20	U
Vinyl chloride	U	1.2	"		U			20	U

**MRL Verification (1307020-PS1)**

Prepared &amp; Analyzed: 07/03/13

**EPA TO-15**

(m- and/or p-)Xylene	1.4200	ug/m3	1.8700	75.9	52-160	MRL-5
1,1,1-Trichloroethane	1.1000	"	1.1600	94.8	48-164	MRL-5
1,1,2,2-Tetrachloroethane	1.2700	"	1.4700	86.4	44-166	MRL-5
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	1.6600	"	1.6100	103	53-160	MRL-5
1,1,2-Trichloroethane	1.0900	"	1.1700	93.2	51-162	MRL-5
1,1-Dichloroethane	0.82000	"	0.86000	95.3	52-156	MRL-5
1,1-Dichloroethene (1,1-Dichloroethylene)	0.81000	"	0.82000	98.8	50-160	MRL-5
1,2,4-Trichlorobenzene	1.1100	"	1.3900	79.9	10-179	MRL-5, QC-3, QC-5
1,2,4-Trimethylbenzene	0.60000	"	1.0300	58.3	46-156	MRL-5
1,2-Dibromoethane (EDB)	1.4900	"	1.6400	90.9	50-158	MRL-5
1,2-Dichlorobenzene	0.95000	"	1.2600	75.4	48-157	MRL-5
1,2-Dichloroethane	0.85000	"	0.87000	97.7	51-157	MRL-5
1,2-Dichloropropane	0.85000	"	0.99000	85.9	49-160	MRL-5
1,2-Dichlorotetrafluoroethane (Freon 114)	1.4200	"	1.4000	101	49-167	MRL-5
1,3,5-Trimethylbenzene	0.71000	"	1.0100	70.3	46-161	MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

## Volatile Organics (VOA) - Quality Control

## US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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**Batch 1307020 - V TO-15 Air Canister****MRL Verification (1307020-PS1)**

Prepared &amp; Analyzed: 07/03/13

1,3-Butadiene	0.96000		ug/m3	0.96000	100	42-171			MRL-5
1,3-Dichlorobenzene	0.98000		"	1.2900	76.0	49-156			MRL-5
1,4-Dichlorobenzene	0.92000		"	1.2900	71.3	48-153			MRL-5
1,4-Dioxane	0.56000		"	0.79000	70.9	17-169			MRL-5, QC-5
3-Chloropropene	1.1100		"	1.3300	83.5	47-160			MRL-5
4-Ethyltoluene	1.4200		"	2.1300	66.7	45-166			MRL-5
Acetone	0.53000		"	0.52000	102	51-174			MRL-5
Acrylonitrile	0.38000		"	0.43000	88.4	39-167			MRL-5
Benzene	0.65000		"	0.68000	95.6	50-160			MRL-5
Benzyl chloride	0.67000		"	1.1400	58.8	26-165			MRL-5, QC-5
Bromodichloromethane	1.4100		"	1.4700	95.9	46-163			MRL-5
Bromoform	1.8000		"	2.2700	79.3	10-188			MRL-5
Bromomethane	0.84000		"	0.82000	102	32-189			MRL-5
Carbon disulfide	0.68000		"	0.68000	100	51-159			MRL-5
Carbon Tetrachloride	1.3000		"	1.3200	98.5	50-163			MRL-5
Chlorobenzene	0.94000		"	0.99000	94.9	53-156			MRL-5
Chloroethane	0.49000		"	0.56000	87.5	41-188			MRL-5
Chloroform	1.0300		"	1.0200	101	50-161			MRL-5
Chloromethane	0.40000		"	0.43000	93.0	39-175			MRL-5
cis-1,2-Dichloroethene	0.77000		"	0.85000	90.6	50-156			MRL-5
cis-1,3-Dichloropropene	0.76000		"	0.96000	79.2	47-159			MRL-5
Cyclohexane	0.69000		"	0.76000	90.8	50-155			MRL-5
Dibromochloromethane	1.6400		"	1.8700	87.7	47-159			MRL-5
Dichlorodifluoromethane (Freon 12)	1.0200		"	1.0000	102	53-163			MRL-5
Ethyl Acetate	0.66000		"	0.79000	83.5	45-161			MRL-5
Ethyl Benzene	0.69000		"	0.93000	74.2	50-157			MRL-5
Heptane	0.81000		"	0.90000	90.0	45-160			MRL-5
Hexachlorobutadiene	2.0500		"	2.2400	91.5	14-191			MRL-5, QC-5
Hexane	0.66000		"	0.77000	85.7	51-153			MRL-5
Isooctane	0.91000		"	1.0300	88.3	49-157			MRL-5
Isopropanol	0.58000		"	0.54000	107	10-191			MRL-5, QC-5
Methyl Butyl Ketone	0.65000		"	0.90000	72.2	10-181			MRL-5
Methyl Ethyl Ketone	0.48000		"	0.65000	73.8	45-161			MRL-5
Methyl Isobutyl Ketone	0.69000		"	0.90000	76.7	40-170			MRL-5
Methyl T-Butyl Ether (MTBE)	0.66000		"	0.83000	79.5	53-158			MRL-5
Methylene Chloride	0.76000		"	0.73000	104	50-162			MRL-5
o-Xylene	0.69000		"	0.94000	73.4	52-156			MRL-5
Styrene	0.58000		"	0.90000	64.4	50-156			MRL-5



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Volatile Organics (VOA) - Quality Control****US-EPA, Region 4, SESD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 1307020 - V TO-15 Air Canister****MRL Verification (1307020-PS1)**

Prepared &amp; Analyzed: 07/03/13

Tetrachloroethylene (Tetrachloroethylene)	1.3900	ug/m3		1.4400		96.5	48-168			MRL-5
Tetrahydrofuran	0.57000	"		0.65000		87.7	39-169			MRL-5
Toluene	0.65000	"		0.81000		80.2	52-158			MRL-5
trans-1,2-Dichloroethene	0.74000	"		0.84000		88.1	53-156			MRL-5
trans-1,3-Dichloropropene	0.76000	"		1.0000		76.0	46-161			MRL-5
Trichloroethylene (Trichloroethylene)	1.1400	"		1.1600		98.3	49-157			MRL-5
Trichlorofluoromethane (Freon 11)	1.1900	"		1.1800		101	54-161			MRL-5
Vinyl acetate	0.56000	"		0.77000		72.7	37-169			MRL-5
Vinyl bromide	1.0300	"		0.96000		107	49-157			MRL-5
Vinyl chloride	0.50000	"		0.55000		90.9	42-171			MRL-5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 13-0364

Project: 13-0364, Lee's Lane Landfill Satellite Site - Reported by Sallie Hale

**Notes and Definitions for QC Samples**

- U The analyte was not detected at or above the reporting limit.
- B-3 Level in blank does not impact data quality
- J The identification of the analyte is acceptable; the reported value is an estimate.
- MRL-5 MRL verification for Air matrix
- Q-2 Result greater than MDL but less than MRL.
- QC-1 Analyte concentration low in continuing calibration verification standard
- QC-3 Analyte calibration criteria not met
- QC-5 Calibration check standard less than method control limits.
- QC-6 Calibration check standard greater than method control limits.
- QL-2 Laboratory Control Spike Recovery greater than method control limits
- QR-2 MRL verification recovery greater than upper control limits.
- XD-1 Duplicate results less than MRL

**APPENDIX E**  
**FIELD SAMPLING LOGBOOK**  
**(45 pages)**

United States Environmental Protection Agency  
Region 4  
Science and Ecosystem Support Division  
980 College Station Road  
Athens, Georgia 30605-2720



**LEES LANE LANDFILL SITE**

**LOUISVILLE, JEFFERSON COUNTY, KENTUCKY**  
**SESD PROJECT ID NO: 13-0364**  
**SESD PROJECT LEADER: TIM SLAGLE**

**SOIL GAS SAMPLING LOGBOOK**

Book 1 of 1  
Inclusive Dates: June 4 to June 6, 2013

**List of personnel in logbook:**

Name	Initials	Organization/Duties
Tim Slagle	TS	EPA, Team Leader
Steve Camp	SC	ILS, Sampler

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky

SESD PROJECT # 13-0364

June 2013

LLTB

~~Tip Blank~~

Sample I.D.

LLTB

<Station ID><media code><Date>

GPS Location

N/A

Street Address

N/A

Site Description

N/A

Station ID is #R4DART#

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth N/A

Orifice or Flow Controller # N/A

Canister # 4547

Name of Person Collecting Sample

Start Date 6/4/2013 Start Time 1300

Stop Date N/A Stop Time N/A

~~Tip Blank~~  
not opened

Notes: (other measurements)

6/4/2013 TVA Calibration SESD ID 0610416680  
0900 FID PID  
Zero air -3.07 -0.27

Toluene 271 125  
methane 97.91 0.16  
SC 6/6/13

6/6/2013 post cal

13:15	FID	PID
Zero	-3.74	-0.34
Toluene	272	104
methane	101	0.37

Continued next page

Lees Lane Landfill

SESD Project ID Number: 13-0364

2 of 51

Sampler Initials

Continuation of field record for sample

**Other Notes/Sketch (Include North and Scale)**

TVA Calibration

6/4/2013 0930 Toluene FID 8.92 92.0 ppm  
Methane PID 102.0 ppm

Zero air Logixid Tech lot # LTA021-MD-PG  
TIC < 1.0 ppm ± 5%

Methane 100 ppm Lot # 4TF010C-TM-CM  
Log Tech

Toluene 100 ppm Lot # LTH102-RR-CM  
Log Tech

Post Cal / End Check

6/4/2013 Methane FID 89.67 PID 0.88

Toluene FID 246.220 PID 99.101  
~~7.8~~ 6/4/13 → 7.8 6/4/13

Zero air FID 0.02 PID 1.2

TVA Cal 6/5/2013 FID PID

Methane 93.8 -0.37

Toluene 210 97.07

zero -4.17 -0.32

post cal 6/5/13 methane 91.5 0.85

methane 223 90.47

zero 0.96 -5.32

Sample Team Leader/Sampler Signature/Date

*R. Sh* 6/4/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. LLL-1 Sample I.D. LLL1560613  
<Station ID><media code><Date>

GPS Location N 38.19598° W 085.87745° ± 22ft

Street Address South of 4425 Wilmoth Ave

Site Description end of Wilmoth @ levee  
approx 17 ft from toe of levee

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet bgs Orifice or Flow Controller # 5

Canister # 2776

Name of Person Collecting Sample J. S.

Start Date 6/4/2013 Start Time 13:20

Stop Date 6/5/2013 Stop Time 13:50  
6/4/2013

Notes: (other measurements)

conf air PID 1.04 ppm FID - 4.22

start 29 in H<sub>2</sub>

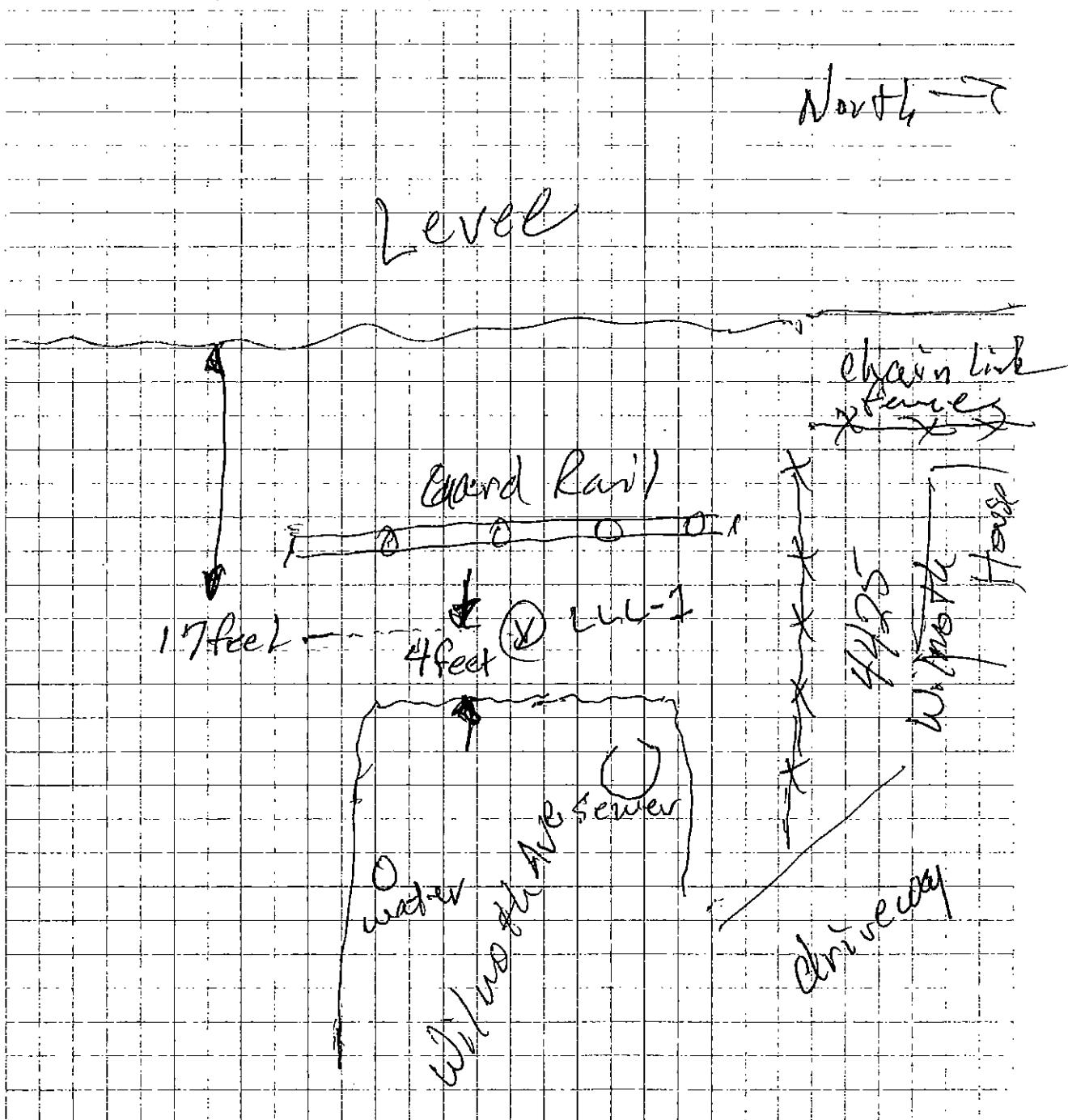
end 0 in H<sub>2</sub>

no PID/FID read -  
PID flamed out 3 times - due to soil tightness

Continued next page

Continuation of field record for sample LLL1560613

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

J. Sh 6/4/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. 266-2 Sample I.D. LLL25G0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19349 W 085.87773 ± 18

Street Address \_\_\_\_\_

Site Description approx 10 feet on West side of  
old Howard Ave approx 205 feet south of Lees Lane

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet bgs Orifice or Flow Controller # 2

Canister # 2787

Name of Person Collecting Sample \_\_\_\_\_ 

Start Date 6/4/2013 Start Time 1444

Stop Date 6/4/2013 Stop Time 1528

Notes: (other measurements)

amb air PID 1.16 ppm FID - 5.80 ppm

Soil PID 1.4 FID - 2.6

start 26 in Hg

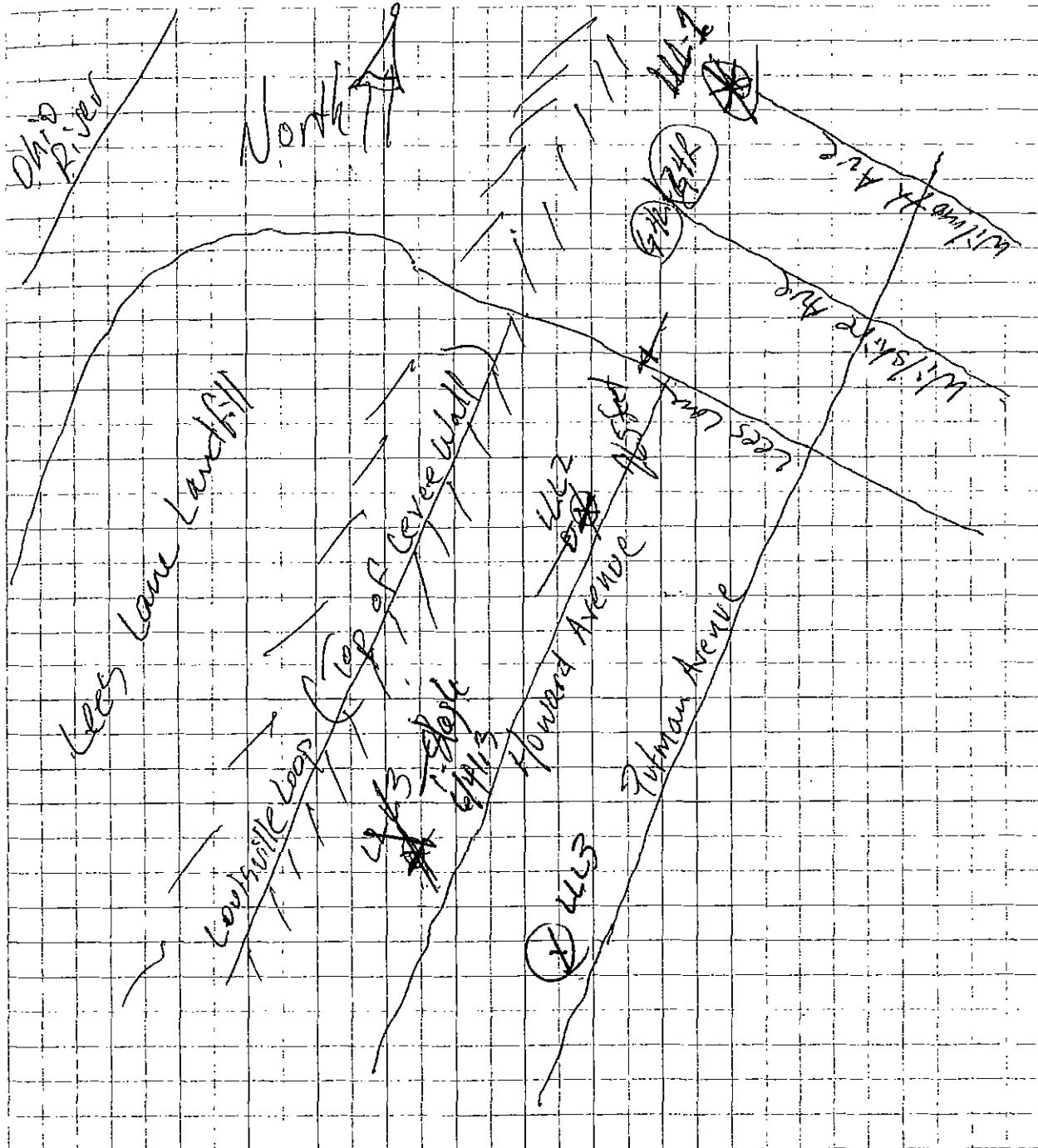
end 0 in Hg

Continued next page

00131

*Continuation of field record for sample U-22590613*

**Other Notes/Sketch** (Include North and Scale)



Sample Team Leader/Sampler Signature/Date

*[Signature]* 6/4/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. LLL-3 Sample I.D. LLL3SG0613  
<Station ID><media code><Date>

GPS Location N 38.19175 W 085.81891 ± 18ft

Street Address 614 Putman Ave.

Site Description Backyard of tree line

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet bgs Orifice or Flow Controller # 3

Canister # 6681

Name of Person Collecting Sample Jay

Start Date 6/4/2013 Start Time 16:04

Stop Date 6/4/2013 Stop Time 17:21

Notes: (other measurements)

air air PID 1.05 FID -4.15

soil gas PID 1.45 FID 9.69

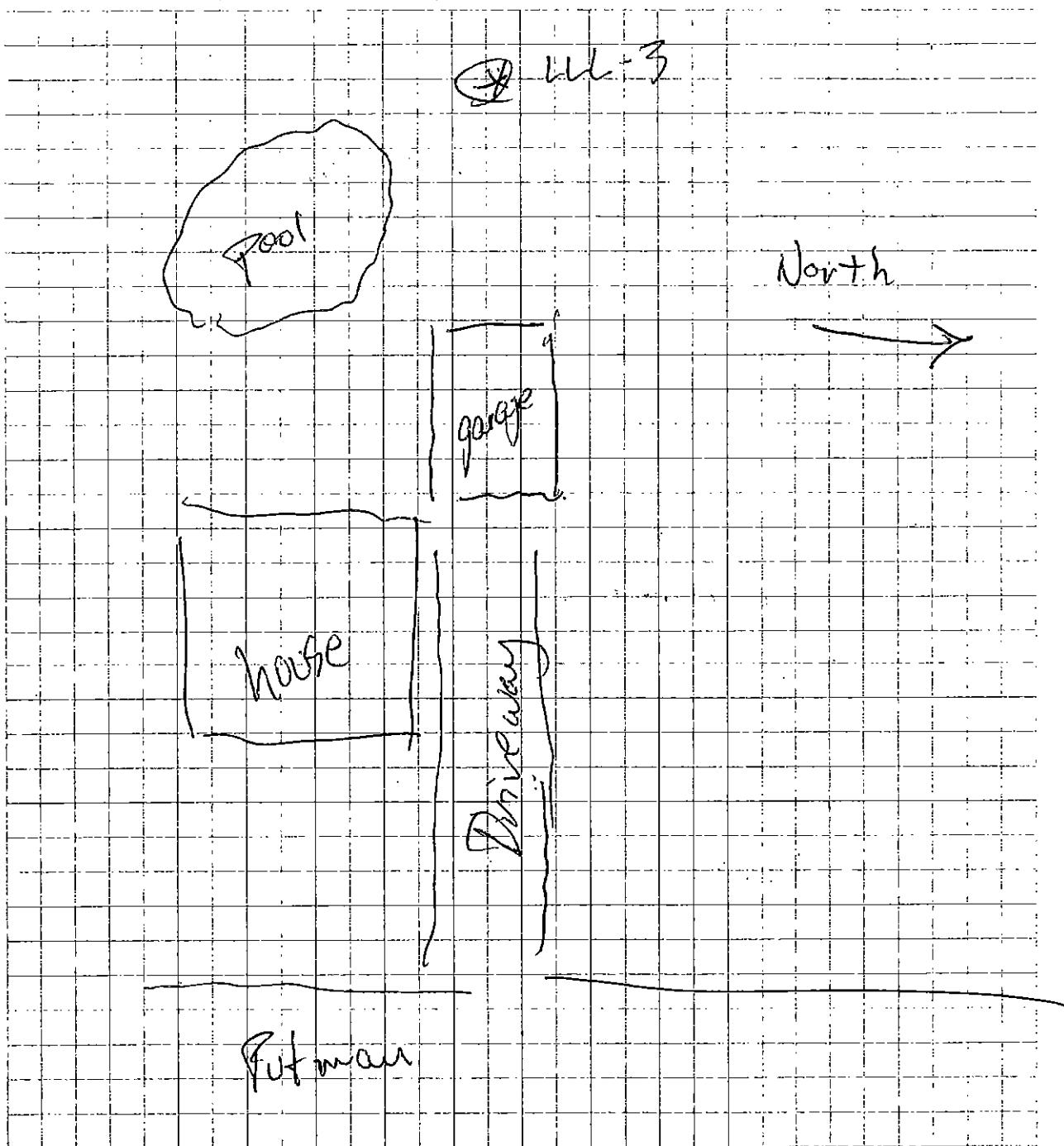
start 29 in Hg

end 0

Continued next page

*Continuation of field record for sample LLL3 SG0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*J.S. 6/4/13*

**US EPA Region 4**  
**Soil Gas Study**  
**Lees Lane Landfill Site**  
**Louisville, Jefferson County, Kentucky**  
**SESD PROJECT # 13-0364**  
**June 2013**

Station I.D. LLL-3 Sample I.D. LLL3SSG0613  
<Station ID>/<media code>/<Date>  
GPS Location N 38.19175 W 085.87891 ± 18feet  
Street Address 614 Putnam Ave.  
Site Description split soil gas sample

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet bgs Orifice or Flow Controller # 4  
Canister # 4393

Name of Person Collecting Sample \_\_\_\_\_

Start Date 6/4/2013 Start Time 16:04  
Stop Date 6/4/2013 Stop Time 17:21

Notes: (other measurements)

start 29 in Hg  
end 0 in Hg

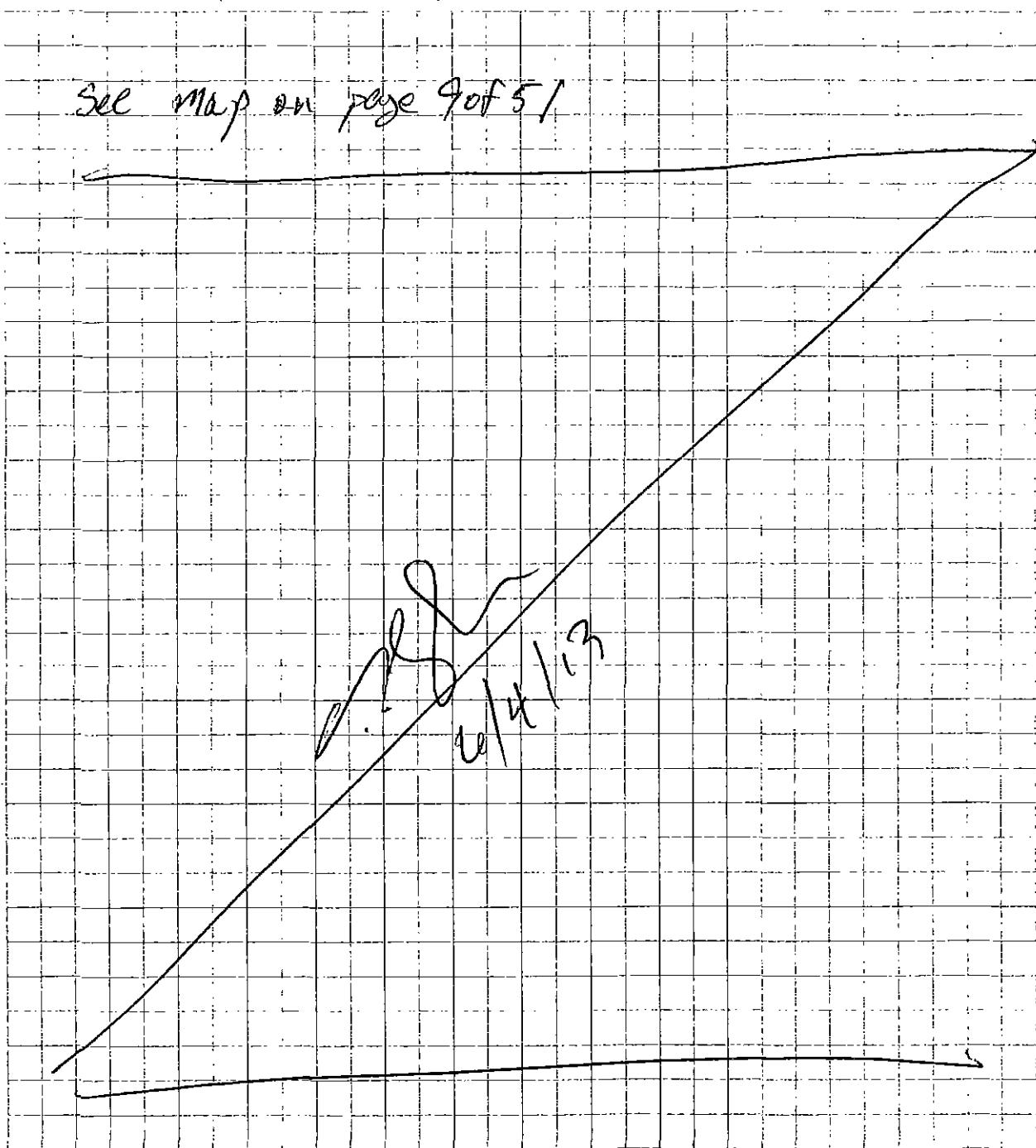
Continued next page

*Continuation of field record for sample*

*LLB 3 5690613*

**Other Notes/Sketch (Include North and Scale)**

*See Map on page 9 of 51*



Sample Team Leader/Sampler Signature/Date

*LLB 6/4/13*

**US EPA Region 4**  
**Soil Gas Study**  
**Lees Lane Landfill Site**  
**Louisville, Jefferson County, Kentucky**  
**SESD PROJECT # 13-0364**  
**June 2013**

Station I.D. LLL-4 Sample I.D. LLL4SG0613  
<Station ID>/<media code>/<Date>

GPS Location N 38°18'966 W 085°8'9941 ± 2 feet

Street Address N/A

Site Description South End of Putman Ave on  
west side of roadbed (approx 10 feet)

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet bgs Orifice or Flow Controller # 5

Canister # 4168

Name of Person Collecting Sample J. Blaske

Start Date 6/4/2013 Start Time 16:44

Stop Date 6/4/2013 Stop Time 17:35

Notes: (other measurements)

amb air PID 1.14 ppm FID - 3.94

Soil PID 1.36 FID - 2.18

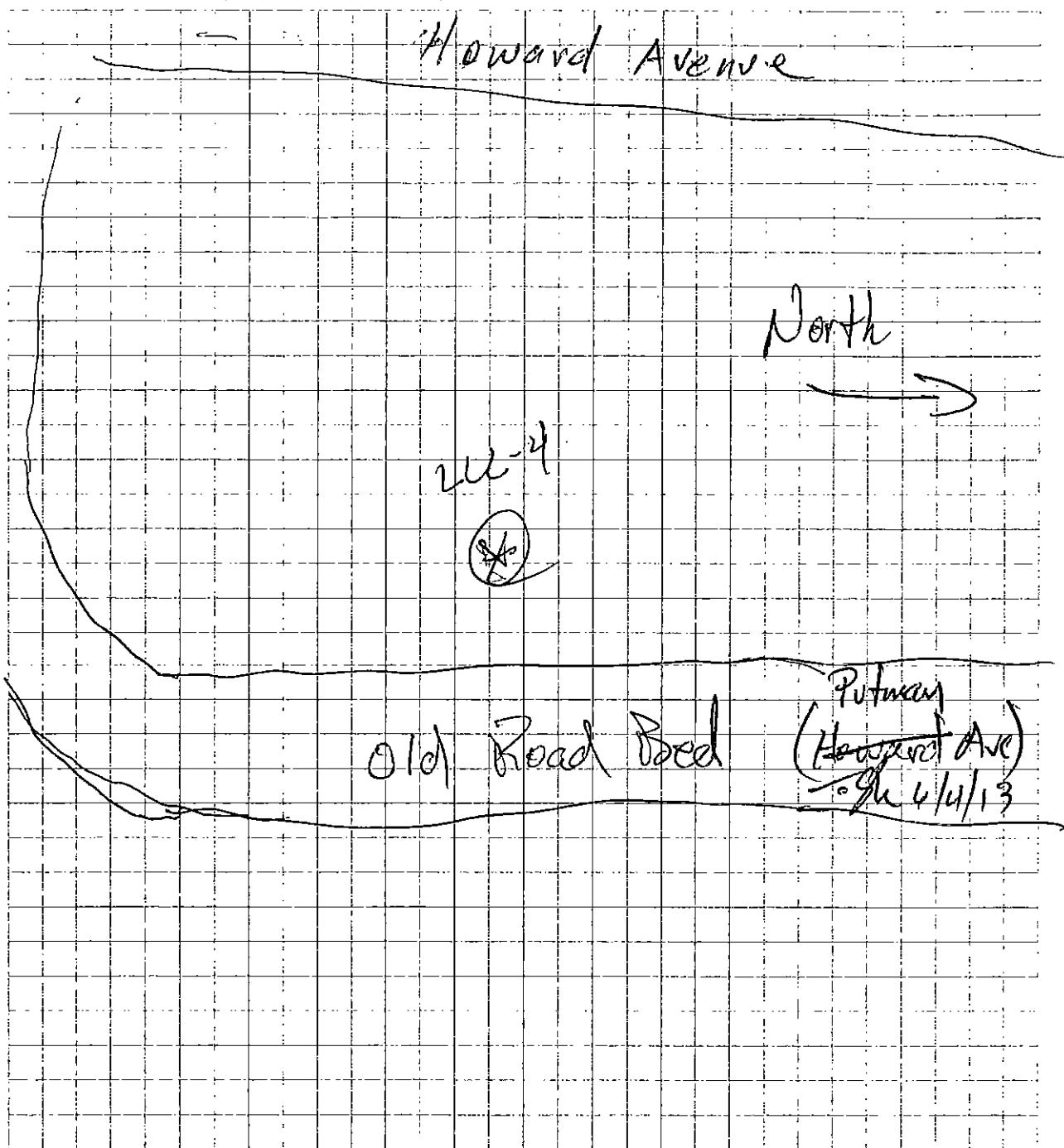
start 29 in Hg

end 0 in Hg

Continued next page

*Continuation of field record for sample 444-560613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*J.S. 4/4/13*

**US EPA Region 4**  
**Soil Gas Study**  
**Lees Lane Landfill Site**  
**Louisville, Jefferson County, Kentucky**  
**SESD PROJECT # 13-0364**  
**June 2013**

Station I.D. LLL-S Sample I.D. LLL5SG0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.18873 W 085.87991 ± 18ft

Street Address MRA

Site Description North of intersection of old levee  
and active levee in woods approx 100 yards

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 6 to 24 feet Orifice or Flow Controller # 6

Canister # 3587

Name of Person Collecting Sample J. R. Mayle

Start Date 6/5/2013 Start Time 10:23

Stop Date 6/5/2013 Stop Time 11:12

Notes: (other measurements)

amb PID 0.32 ppm FID - 3,45 ppm

soil/gas PID 0.32 ppm FID ~ 6.53 ppm

start 29 in Hg

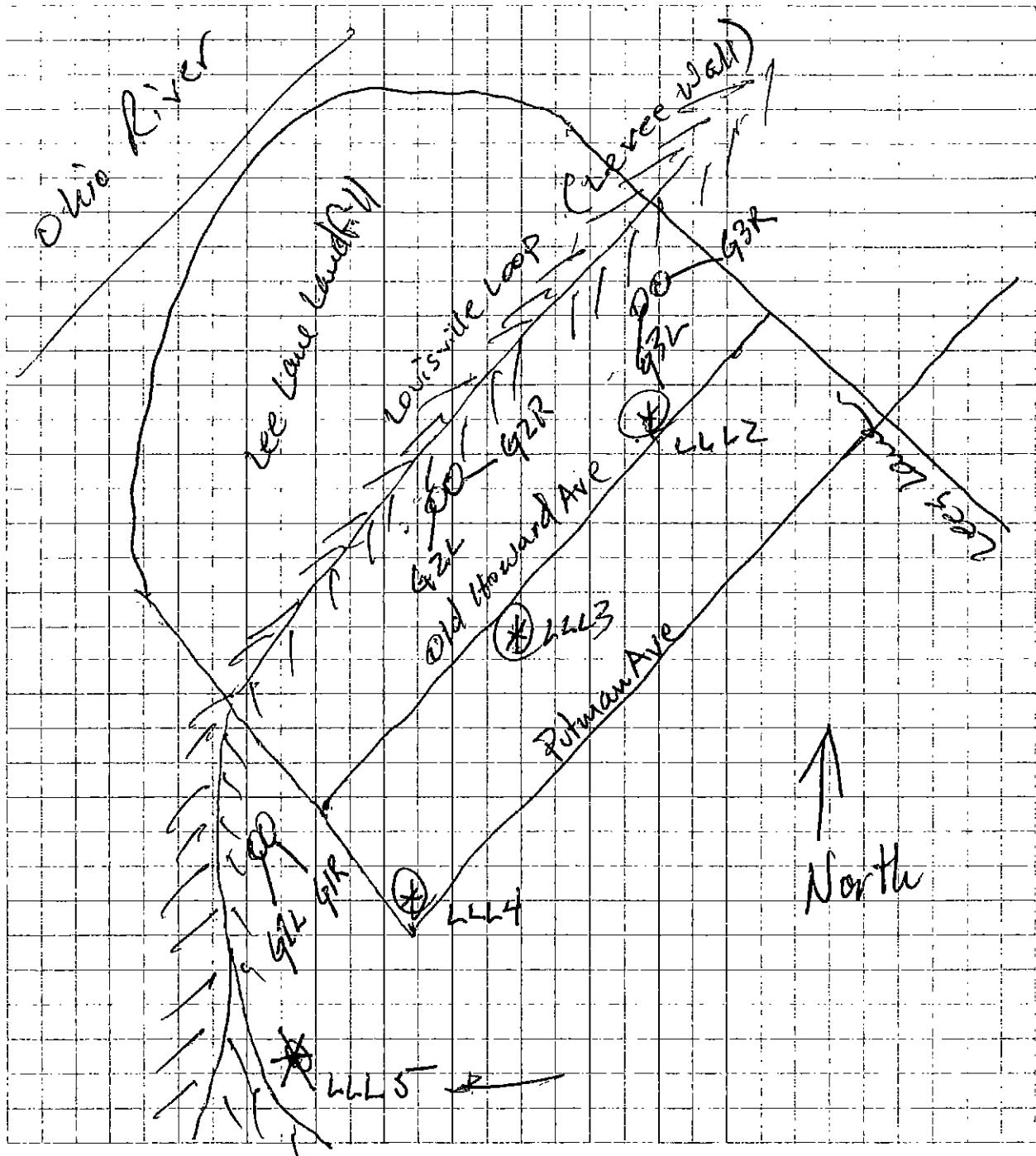
end 0 in Hg

Continued next page

14 01 21

Continuation of field record for sample LLL5SG0613

Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date \_\_\_\_\_

 6/5/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GMW-1 Sample I.D. GMW1SG 0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19072° W 085.88049° ± 18ft

Street Address east of levee wall, south end of LF

Site Description GMW1 is approx 200 feet north west  
of the intersection of old Howard Ave and Putman Ave.

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth top of well head Orifice or Flow Controller # 7

Canister # 4668

Name of Person Collecting Sample T-SR

Start Date 6/5/2013 Start Time 11:55

Stop Date 6/5/2013 Stop Time 12:55

sample collected from fitting on top of well head

Notes: (other measurements)

air flow PID 0.30 ppm FID -5.04 ppm

soil gas PID 10 ppm FID -17.5 ppm

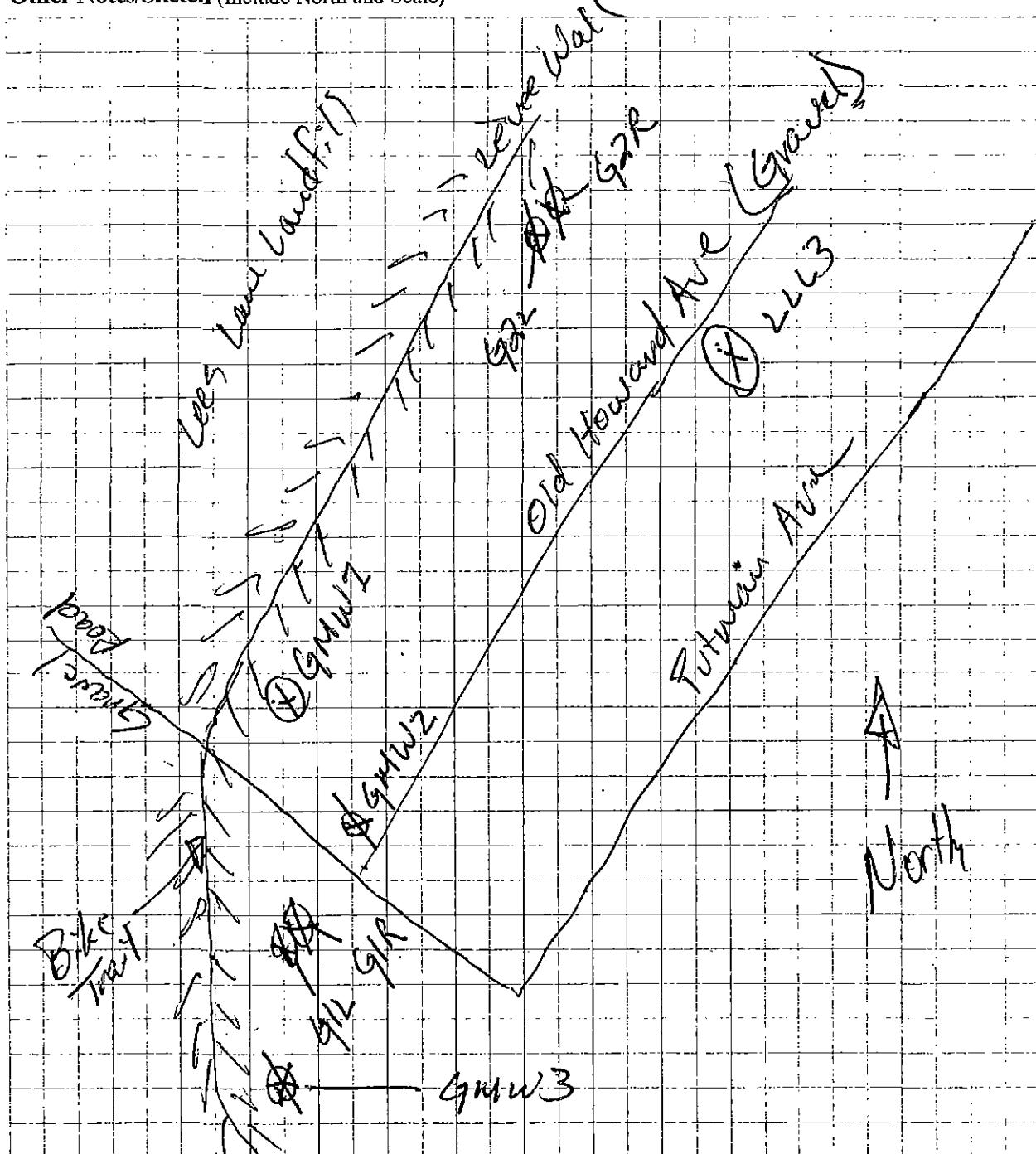
start 28 in Hg

Continued next page

10 01 11

*Continuation of field record for sample* G.M.W.1.SG.0613

**Other Notes/Sketch** (Include North and Scale)



Sample Team Leader/Sampler Signature/Date

88 6/5/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GMW-2 Sample I.D. GMW2SG0613  
<Station ID>/<media code>/<Date>  
GPS Location N 38, 19017 W 85.88006 ± 16 feet see note &  
Street Address N/A GMW-2 is at intersect of Howard & Potomac Ave.  
Site Description north of gravel road that tees into east side of river.  
Type of sample:  Air Sample  Soil Gas Sample  
well screen top of well head  
Sampling Depth 4.5 to 20.2 ft. bgs Orifice or Flow Controller # 8  
Canister # 14130-T-8 14127

Name of Person Collecting Sample JR

Start Date 6/5/2013 Start Time 12:34

Stop Date 6/5/2013 Stop Time 13:10

sample collected from fitting on top of well head

Notes: (other measurements)

ambient PID 0.85 ppm FID - 3.28

soil gas PID 13.40 ppm FID - 2.39

start 89 in Hg end - ambient

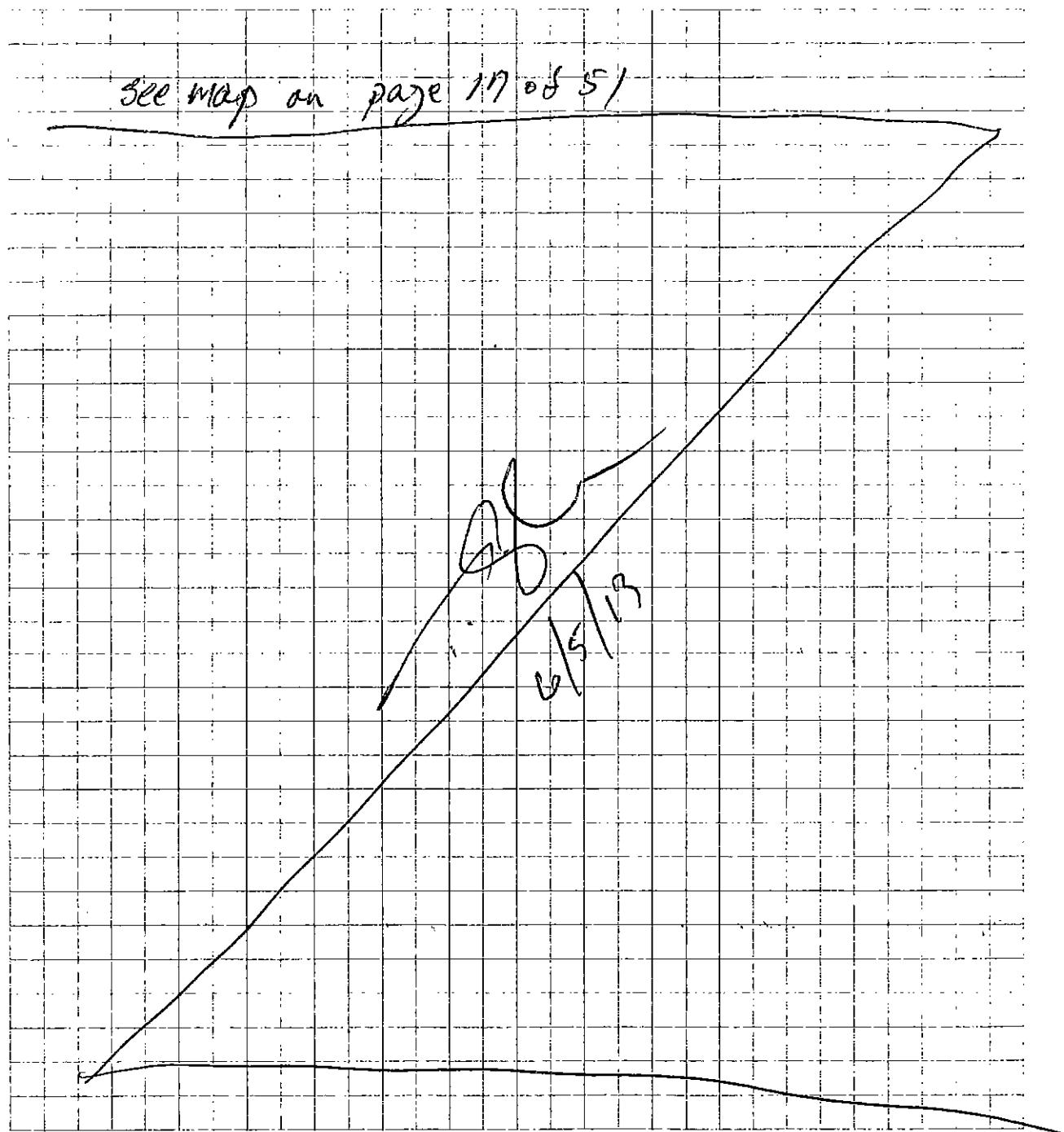
\* GPS corrected in Google Earth to 38.190195 - 85.880242°  
due to heavy tree cover at site

Continued next page  
10 01 21

*Continuation of field record for sample*

*GMW 2 56 0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*JL 6/5/13*

**US EPA Region 4**  
**Soil Gas Study**  
**Lees Lane Landfill Site**  
**Louisville, Jefferson County, Kentucky**  
**SESD PROJECT # 13-0364**  
**June 2013**

Station I.D. GHW-2 Sample I.D. GWN255G0613  
<Station ID>/<media code>/<Date>  
GPS Location see page 18  
Street Address see page 18  
Site Description Split @ GHW-2

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth top of well head Orifice or Flow Controller # 9

Canister # 14130

Name of Person Collecting Sample J. H.

Start Date 6/5/2013 Start Time 12:34

Stop Date 6/5/2013 Stop Time 13:10

sample collected from fitting on top of well head

Notes: (other measurements)

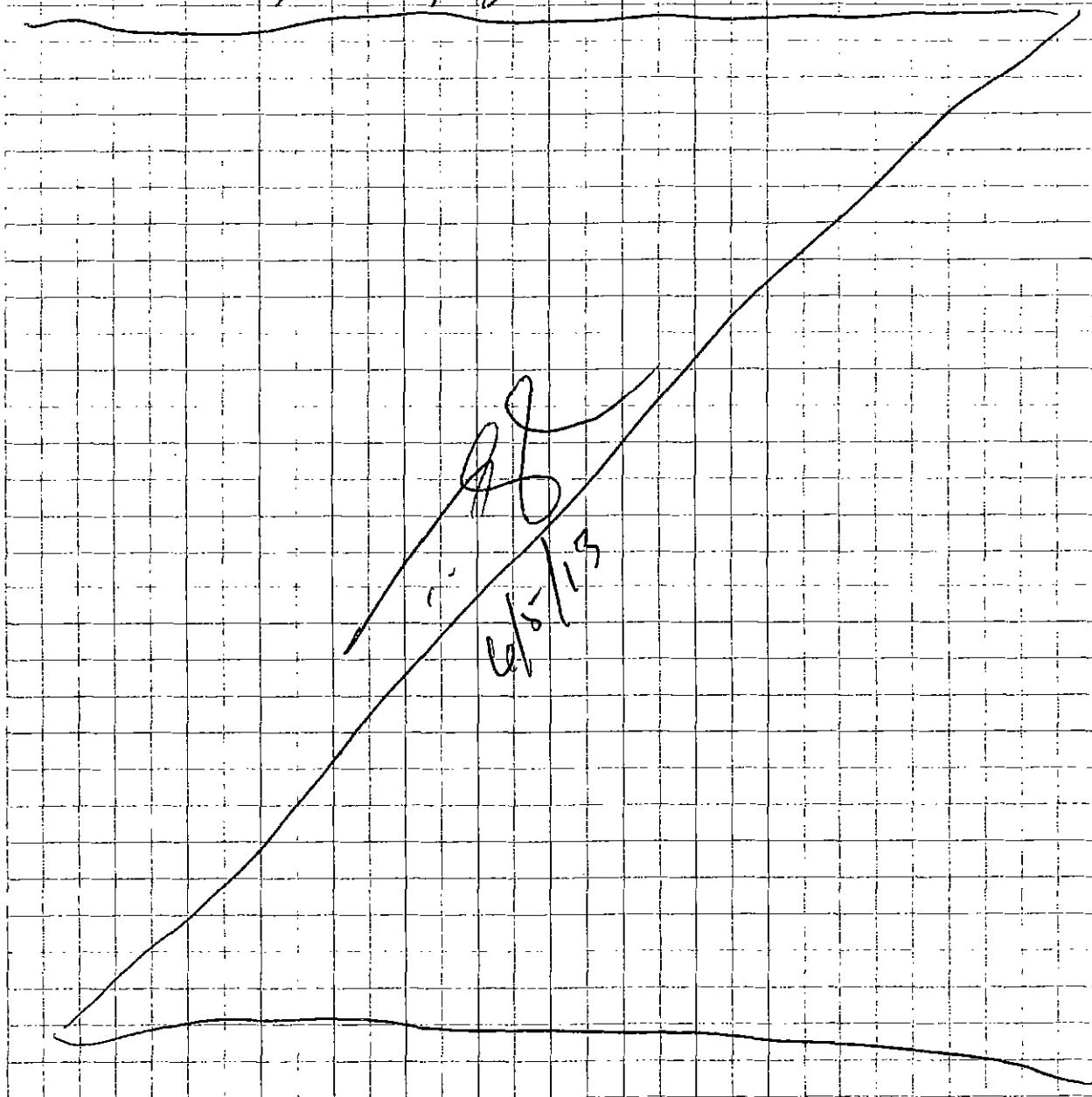
Continued next page

2001 JI

*Continuation of field record for sample GMLD858G0013*

**Other Notes/Sketch (Include North and Scale)**

*See map on page 17 of 51*



Sample Team Leader/Sampler Signature/Date

*JL 6/5/13*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GML-3 Sample I.D. GML3 SG 0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.18953° W 85.88048 ± 18 feet

Street Address N/A

Site Description east of levee *bottom*  
southern most permanent soil gas well

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth 5 to 20 ft. bgs Orifice or Flow Controller # 10

Canister # 3940

Name of Person Collecting Sample T. SL

Start Date 6/5/2013 Start Time 14:50

Stop Date 6/5/2013 Stop Time 15:56

Sample collected from fitting on top of well head

Notes: (other measurements)

ambient Rd 1.35 ppm FID - 3.47 ppm

soil gas TID 1.34 FID - 9.34 ppm

start -30 m Hg

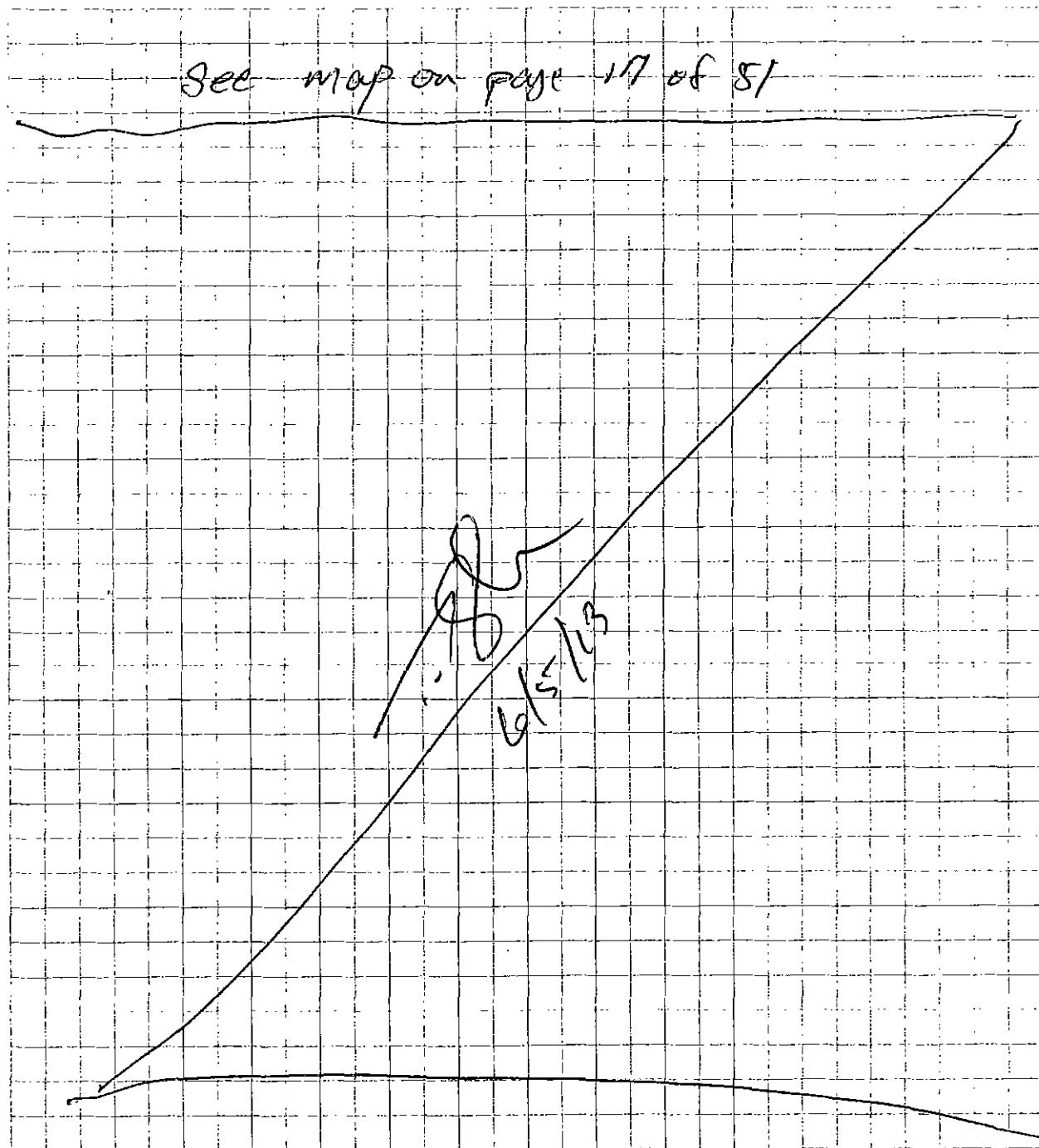
Continued next page

22 01 21

*Continuation of field record for sample*

*GMW3SG0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*JL 6/5/13*

*JL*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GIR Sample I.D. GIRSG0613  
<Station ID>/<media code>/<Date>

GPS Location N 38, 19000 W 085, 88048 ± 20 feet

Street Address east of levee, south end of LF

Site Description Right or North Well  
south fitting on well head

Type of sample:  Air Sample  Soil Gas Sample  
shallow screened interval  
Sampling Depth 5 - 15 feet bgs Orifice or Flow Controller # 17

Canister # L 4873

Name of Person Collecting Sample T. J. G.

Start Date 6/5/2013 Start Time 15:18

Stop Date 6/5/2013 Stop Time 16:04

Sample collected from fitting on top of well head

Notes: (other measurements)

ambient FID FID  
1.31 ppm -3.62 ppm

Soil gas 141 ppm -5.23 ppm

-start -28 in Hg

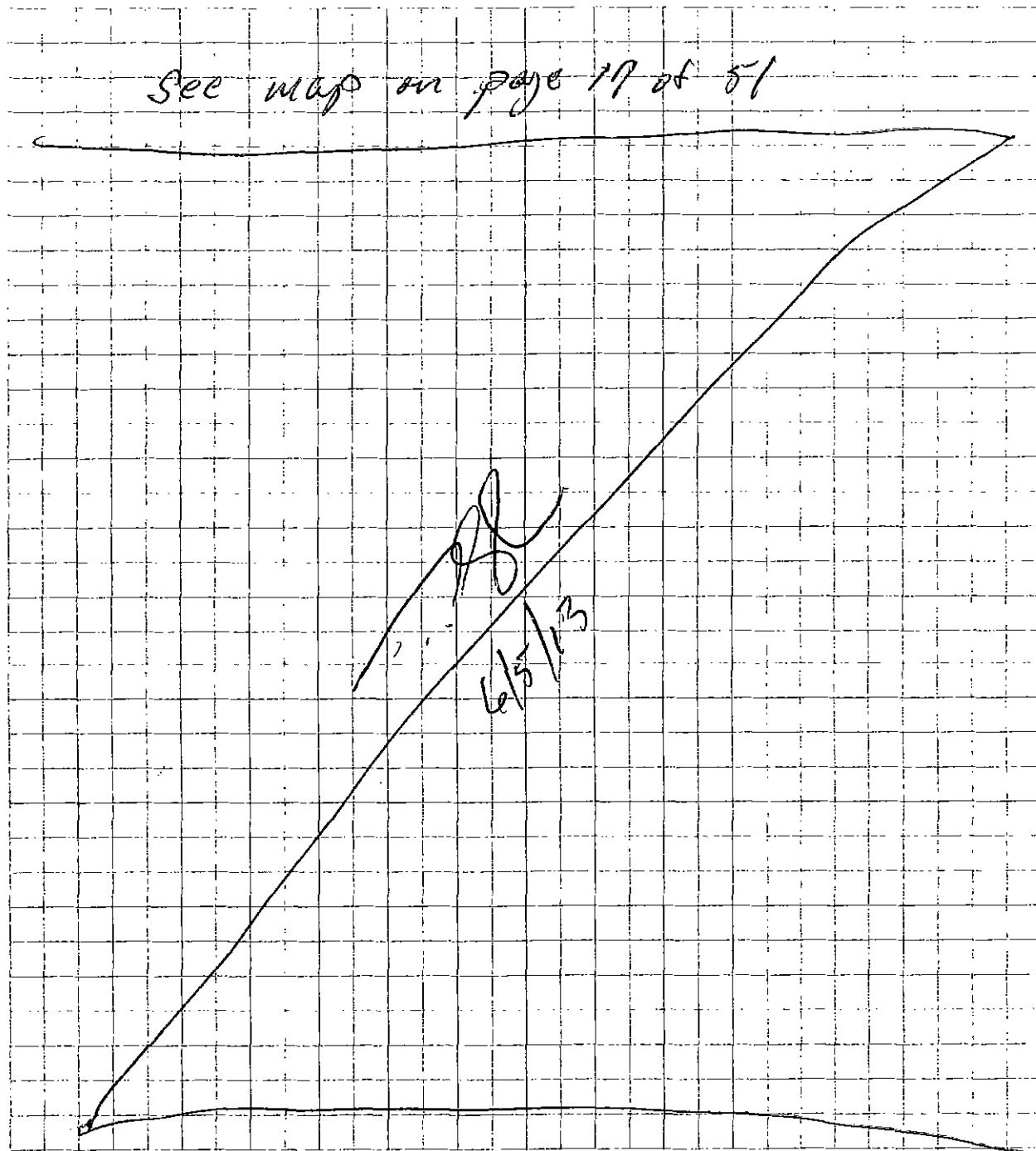
end 0

Continued next page

*Continuation of field record for sample*

*G1R5G0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*JL 4/5/13*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. G1L Sample I.D. G1LSG0613  
<Station ID>/<media code>/<Date>

GPS Location N 38, 18991° W 085, 88048 ± 16

Street Address east of Levee, south end of LF

Site Description Left or South Wall

right or North fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

deep sampling interval  
Sampling Depth 30 to 40 feet bgs Orifice or Flow Controller # 12

Canister # 4671

Name of Person Collecting Sample T. S. TS 6/5/13

Start Date 6/5/2013 Start Time 14:30 15:30

Stop Date 6/5/2013 Stop Time 16:45

Sample collected from fitting on top of well head

Notes: (other measurements)

Ambient PID 1.42 ppm FID - 3.48 ppm

soil gas PID 2.24 ppm FID - 6.98 ppm

start - 29 in Hg

end 0 in Hg

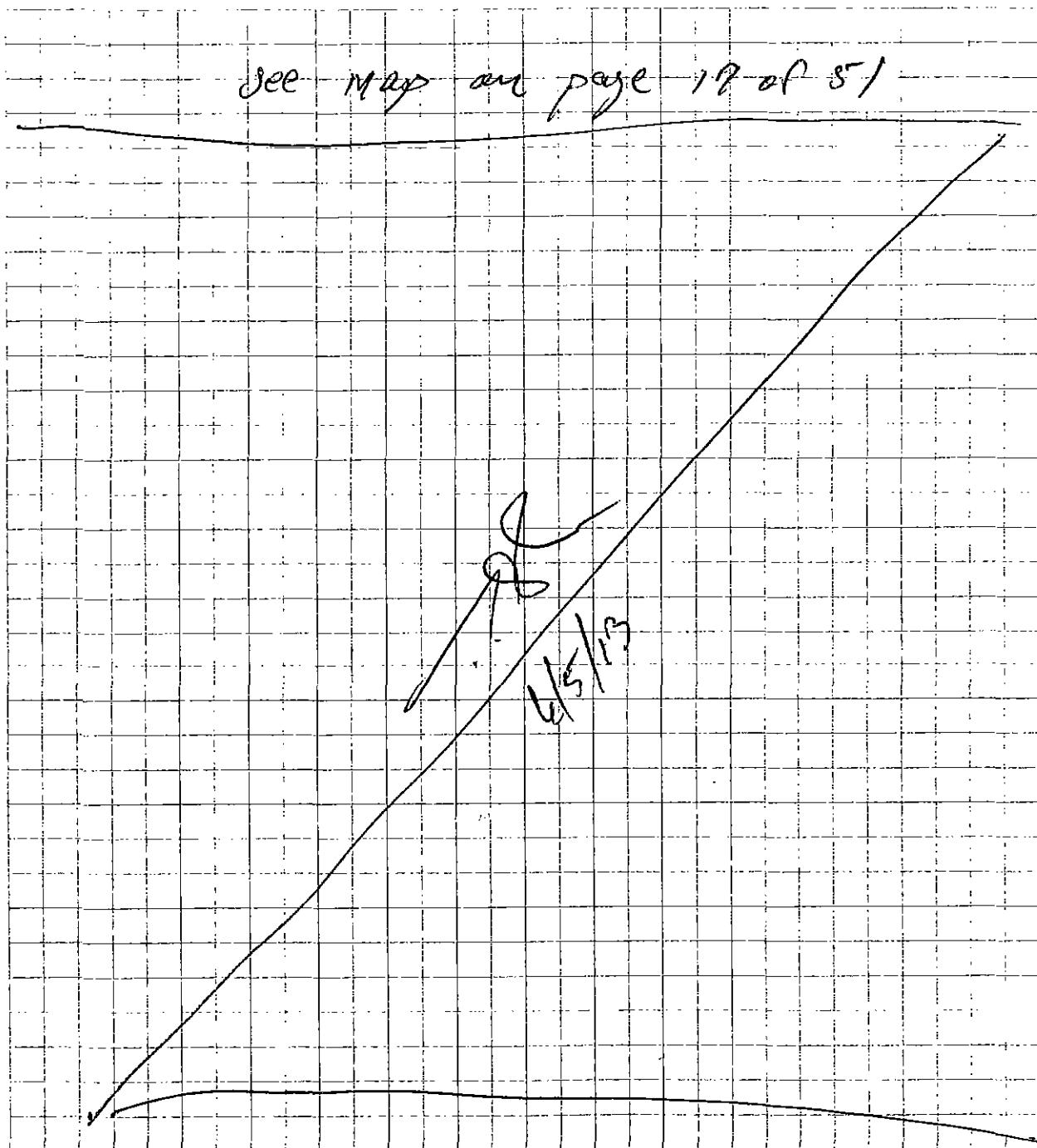
Continued next page

2001 JI

*Continuation of field record for sample*

*G1 L&G 0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*[Signature]* 4/5/13

*[Signature]*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GZR Sample I.D. GZR3G0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19208° W 88.87958° ± 24

Street Address east of levee mid-point of EP

Site Description Right or North Well

Left or South fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

Shallow sampling interval  
Sampling Depth 5 to 15 feet bgs Orifice or Flow Controller # 13

Canister # 4153

Name of Person Collecting Sample A. G. L. 6/5/2013

Start Date 6/5/2013 Start Time 17:43 17:30

Stop Date 6/5/2013 Stop Time 18:17

Sample collected from fitting on top of well head

Notes: (other measurements)

Ambient PID 1,43 ppm FID - 4,23 ppm

Soil gas 1.52 - 6.32

Start 29 mbar

Continued next page

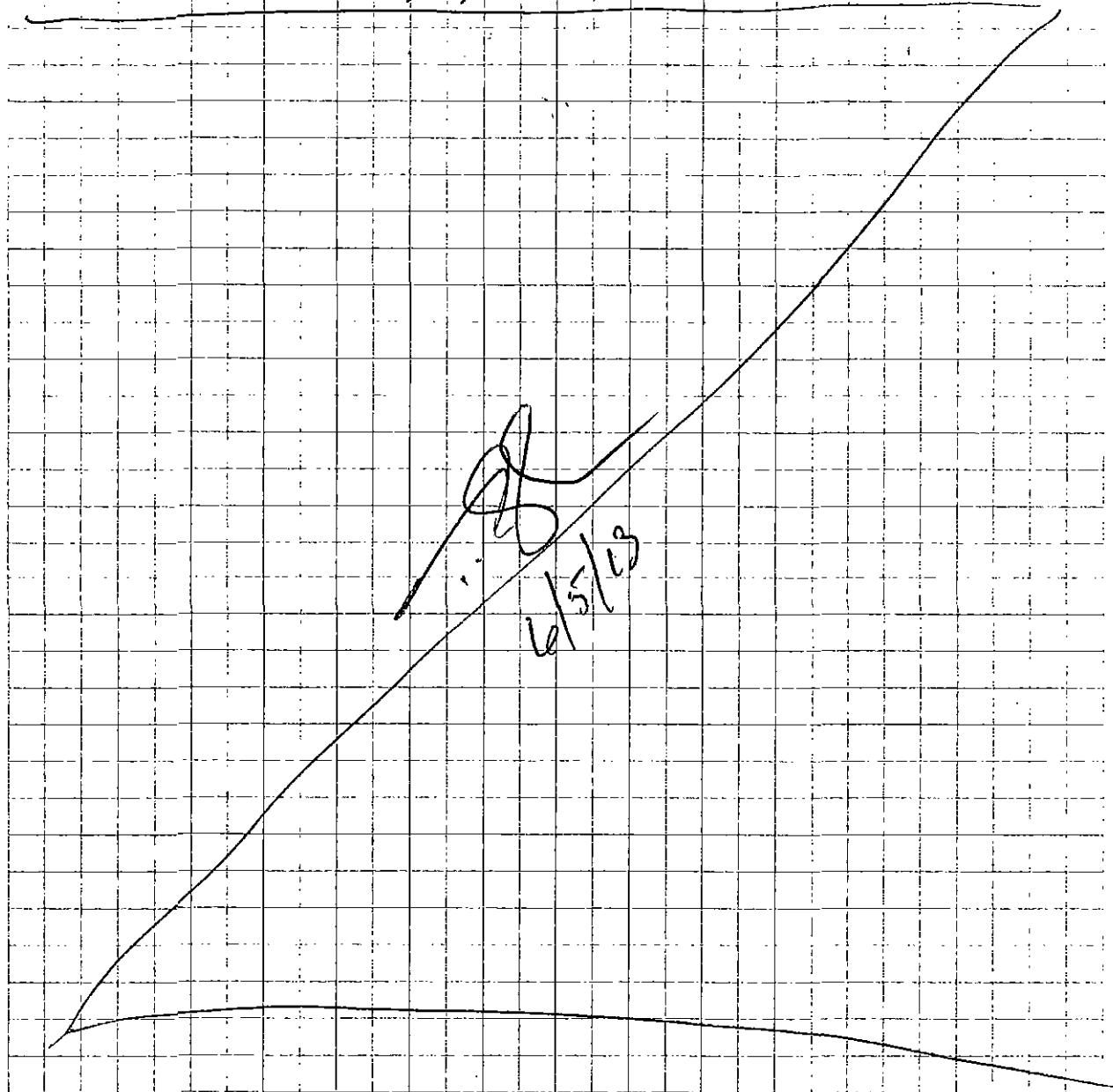
LO 01 J1

*Continuation of field record for sample*

*G2 R5G0613*

**Other Notes/Sketch (Include North and Scale)**

*See map page 17 of 51*



Sample Team Leader/Sampler Signature/Date

*[Signature]* *6/5/13*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
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June 2013

Station I.D. G2L Sample I.D. G2LSG0613  
Station ID><media code>/<Date>

GPS Location N 38.19205 W 085.87968 ± 18 ft

Street Address east of levee mid-point of ER

Site Description Left or South Well

west fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

*deep screened interval*

Sampling Depth 30 to 40 feet bgs Orifice or Flow Controller # 14

Canister # 2770

Name of Person Collecting Sample RJM

Start Date 6/5/13 Start Time 17:46

Stop Date 6/5/2013 Stop Time 18:20

Sample collected from fitting on top of well head

Notes: (other measurements)

Ambient PID 1.44 ppm FID - 3,417 ppm

Soil Gas PID 2.02 FID - 3,828 ppm

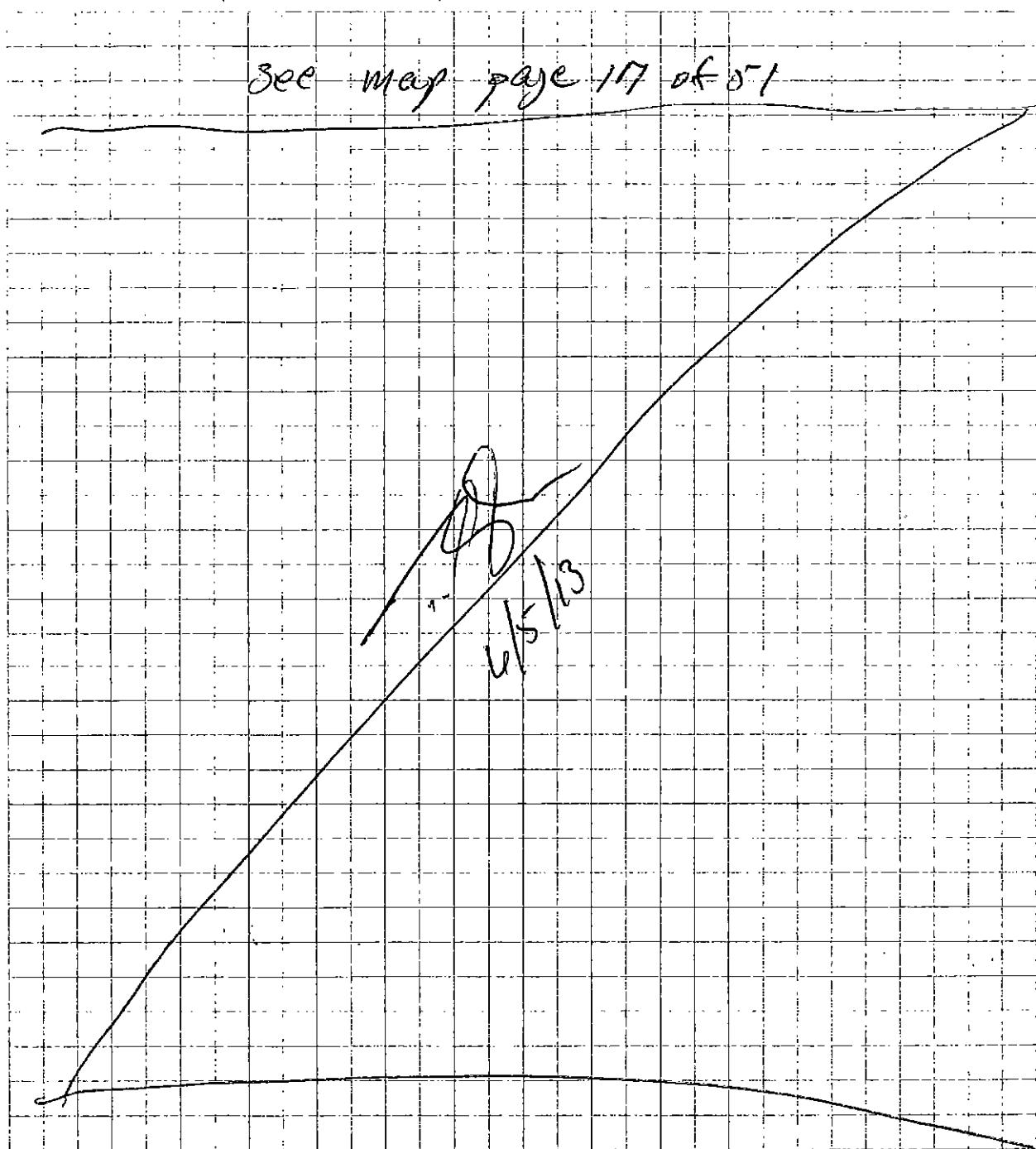
start - 29 at 14

Continued next page

00 01 01

*Continuation of field record for sample* 622590613

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*[Signature]* 6/5/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. 43R Sample I.D. G3RSG0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19426° W 085.87830° ± 23

Street Address North end of LF at Lees Lane

Site Description Right or North Well

left or South fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

Shallow screened interval  
Sampling Depth 5 to 15 feet bgs Orifice or Flow Controller # 15

Canister # 2771

Name of Person Collecting Sample JM

Start Date 6/6/2013 Start Time 9:06

Stop Date 6/6/2013 Stop Time 10:05

Sample collected from fitting on top of well head

Notes: (other measurements)

Ambient ~~at~~ PID 21.67 ppm FID - 1.58 ppm

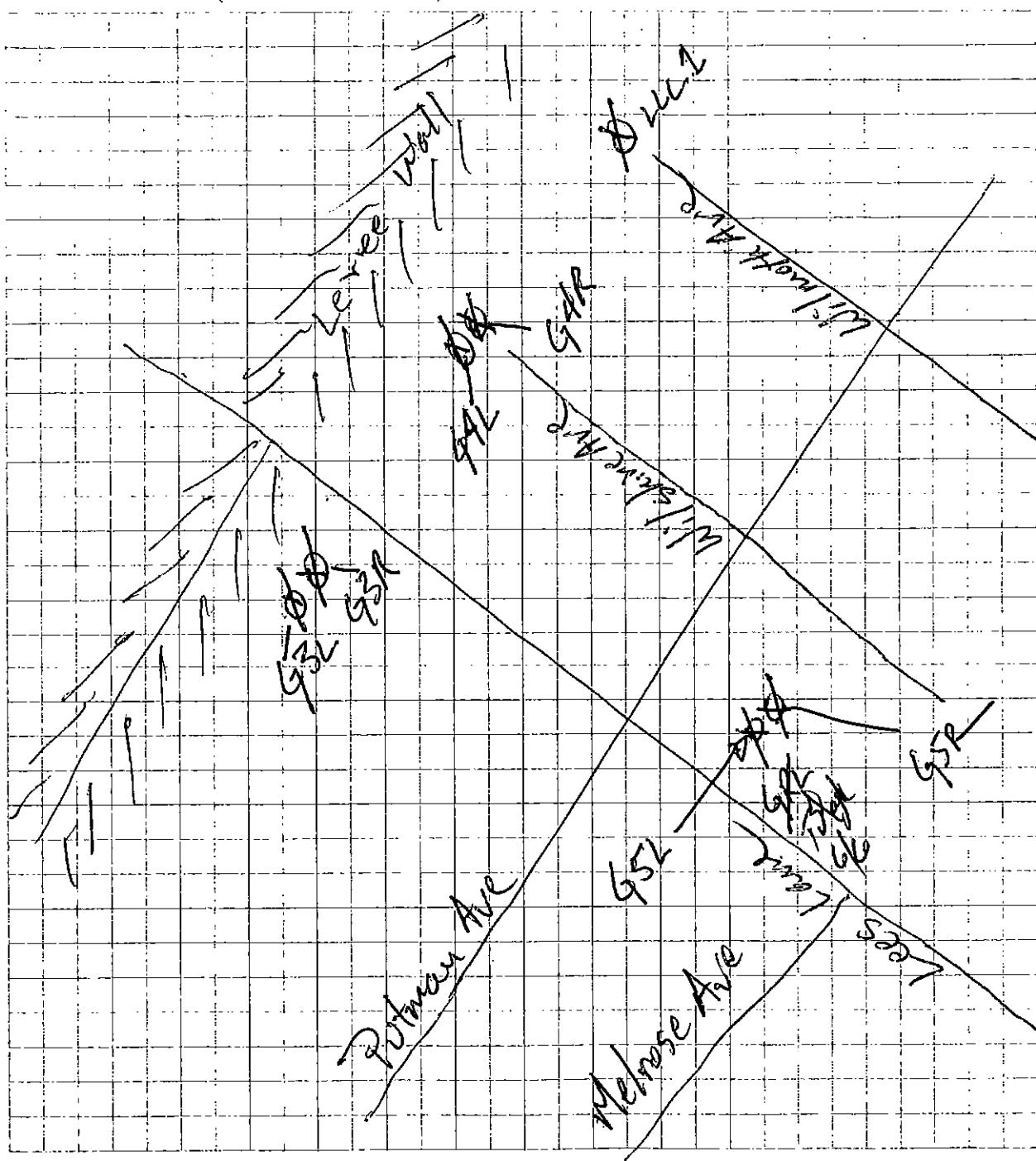
Soil gas 26.33 -3.85

Continued next page

*Continuation of field record for sample*

*G3R5g0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*[Signature]* 6/6/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. G3 L Sample I.D. g3 LSG 0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19423° W 085.87827° ± 20

Street Address Wells @ west end of Wilshire Ave @ levee face

Site Description Left or South well

East fitting on wellhead

Type of sample:  Air Sample  Soil Gas Sample  
deep screened interval

Sampling Depth 30 to 40 feet bgs. Orifice or Flow Controller # 16

Canister # 12230

Name of Person Collecting Sample J.S.

Start Date 6/6/2013 Start Time 0910

Stop Date 6/6/2013 Stop Time 1000

sample collected from fitting on top of wellhead

Notes: (other measurements)

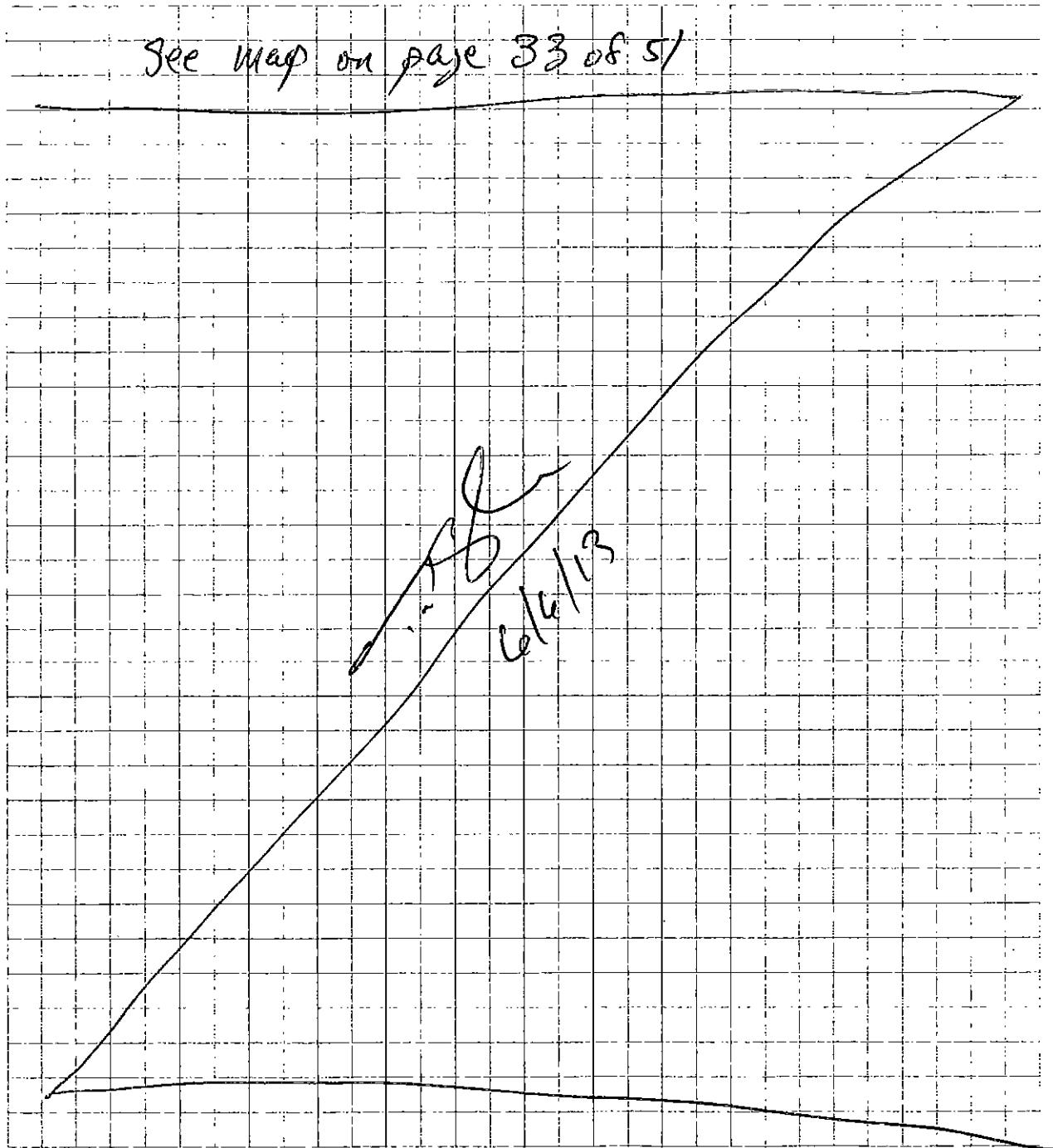
Ambient PID 24.84 ppm FID ~1.56 ppm

soil gas PID 26.13 FID ~1.49 ppm

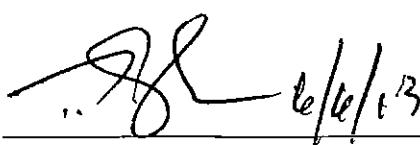
Continued next page

Continuation of field record for sample GBL SG D613

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date



6/4/13



US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. 94-R Sample I.D. G4RSG 0613  
<Station ID>/<media code>/<Date>

GPS Location N38.19530° W085.87778° ±16 ft

Street Address North of LF, east of levee at Willshire Ave.

Site Description Rigkt or North Wed)

east filling on well head

Type of sample:  Air Sample  Soil Gas Sample  
deep screened interval

Sampling Depth 30 to 40 feet bgs Orifice or Flow Controller # 17

Canister # 2869

Name of Person Collecting Sample TJL

Start Date 6/6/2013 Start Time 11:12 12:15

Stop Date 6/6/2013 Stop Time 12:06

Sample collected from filling on top of well head

Notes: (other measurements)

ambient PID 6.72 ppm FID - 1.62 ppm

soil gas PID 6.53 ppm FID - 1.50 ppm

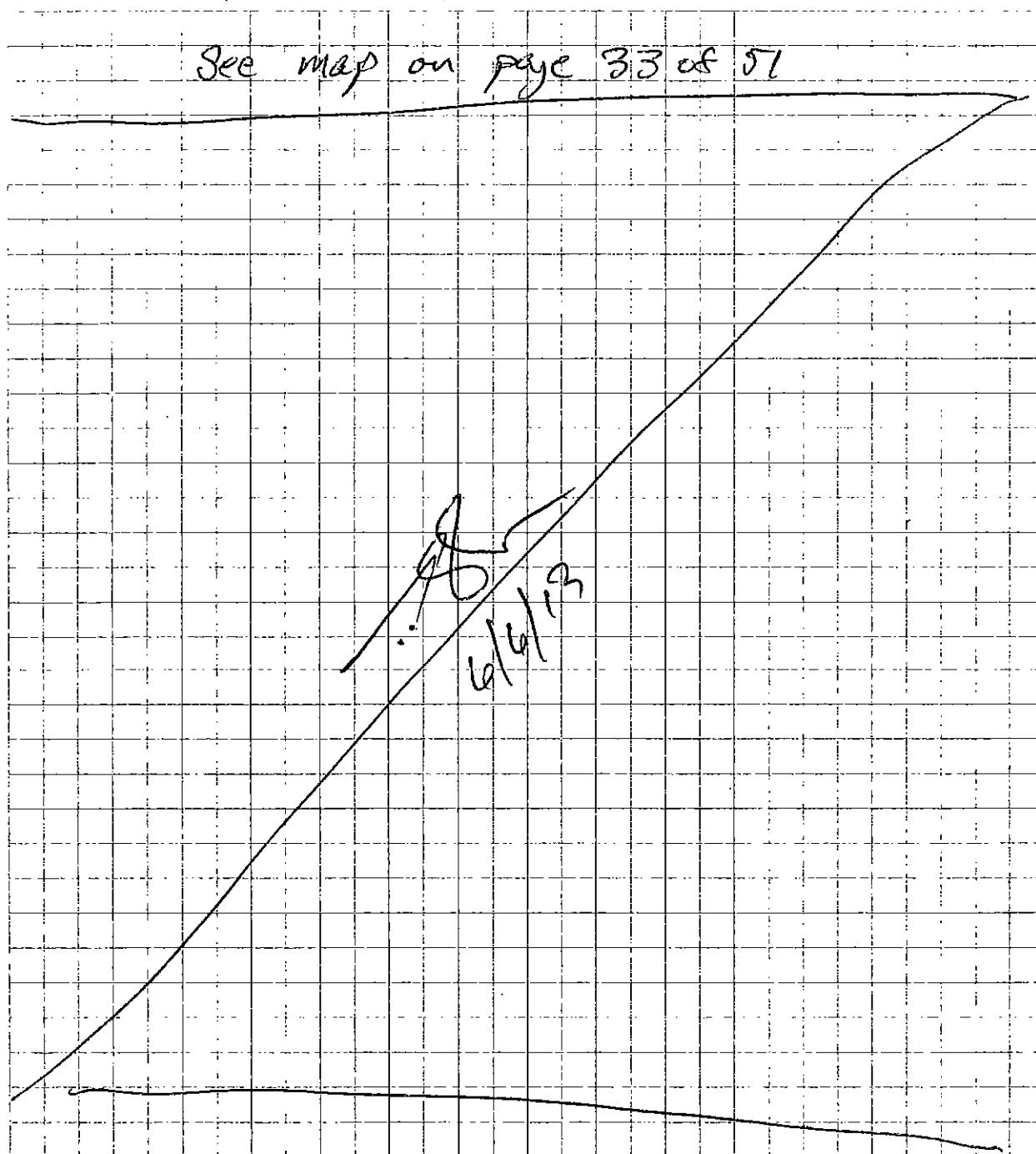
start 29 in Hg

Sample void due to possible bad connection

Continued next page

*Continuation of field record for sample G4RSG0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*[Signature]* 6/6/13

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. G4-L Sample I.D. G4L5G0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19526° W 085.87778° ± 16 feet

Street Address east of levee north of LF at Wilshire Ave

Site Description Left or South Well

west fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

Shallow screened interval  
Sampling Depth 8 to 15 feet bgs Orifice or Flow Controller # 18

Canister # 4185

Name of Person Collecting Sample J. Slayke

Start Date 6/6/2013 Start Time 11:17

Stop Date 6/6/2013 Stop Time 12:03

Notes: (other measurements)

*On 6/6/13  
Not Soap*

ambient PID 6.95 FID - 1.85

soil gas PID 7.45 FID - 1.72

start 29 in bg

well head slip cap has crack

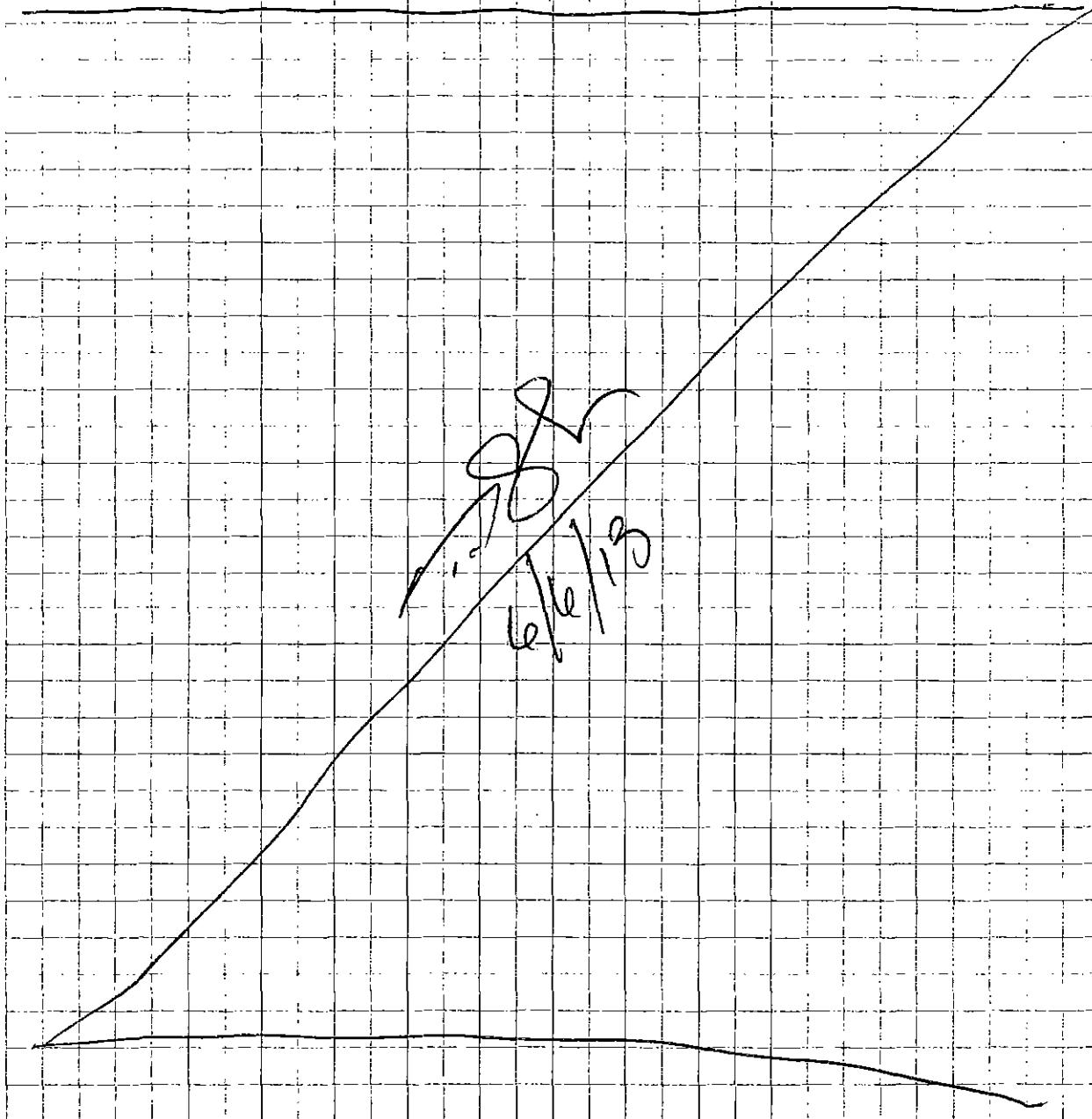
Continued next page

DO NOT USE

*Continuation of field record for sample* GFL SG 0013

**Other Notes/Sketch (Include North and Scale)**

*See map on page 33 of 51*



Sample Team Leader/Sampler Signature/Date

*[Signature]* 6/0/13

*[Signature]*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
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SESD PROJECT # 13-0364  
June 2013

Station I.D. G4R Sample I.D. G4R SG 0613  
<Station ID>/<media code>/<Date>

GPS Location see page 36

Street Address see page 36

Site Description see page 36

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth see page 36 Orifice or Flow Controller # 17

Canister # L4874

Name of Person Collecting Sample J.S.

Start Date 6/6/2013 Start Time 12:15

Stop Date 6/6/2013 Stop Time 13:58

Sample collected from fitting on top of well head

Notes: (other measurements)

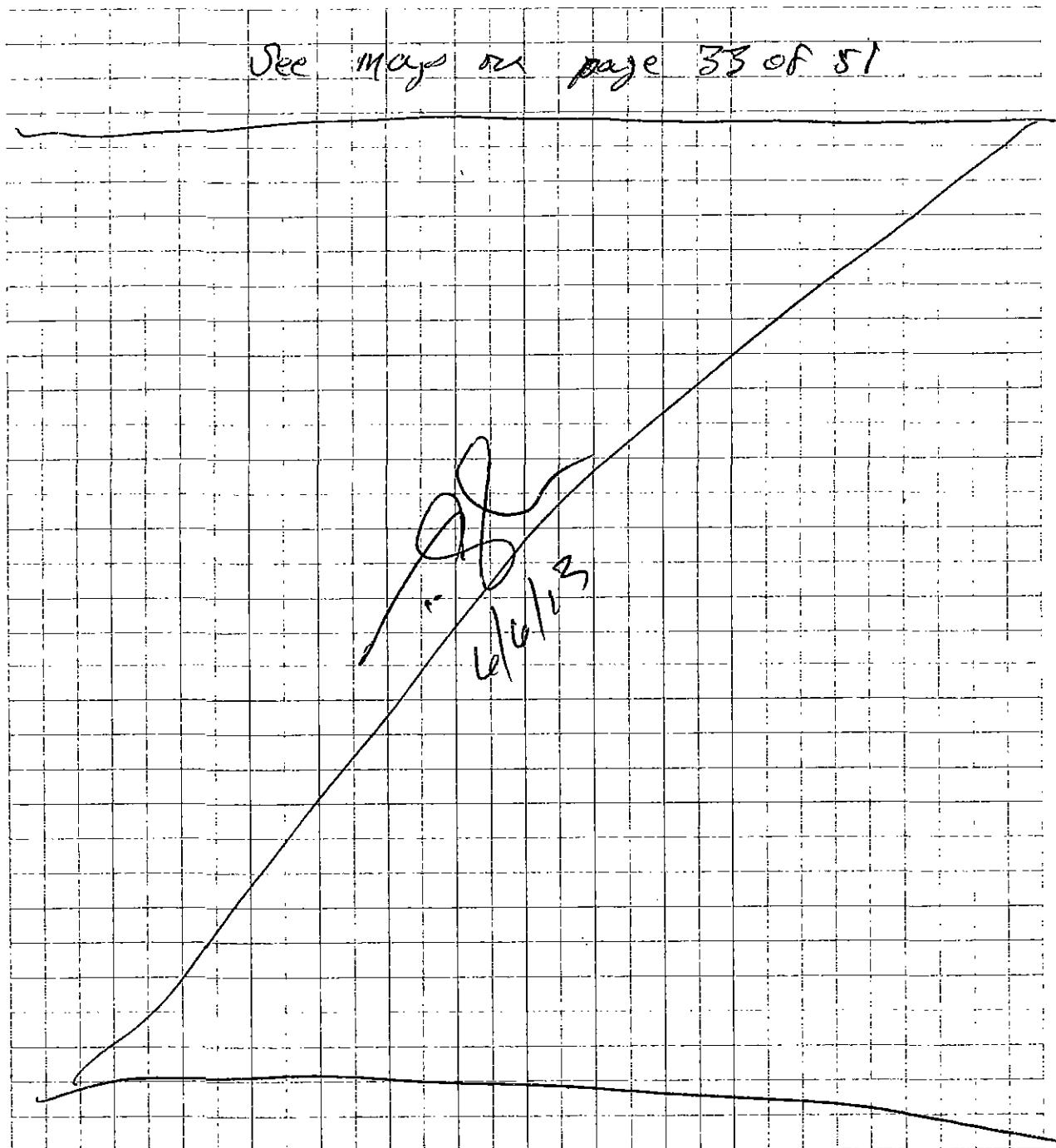
redo of previous G4R

Continued next page

400101

*Continuation of field record for sample* 694 R SG 0613

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*JL 6/6/13*

*JL*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. G5R Sample I.D. G5R SG 0613  
<Station ID>/<media code>/<Date>

GPS Location N 38.19382, W 085.87566 ± 16'

Street Address 4402 Wilshire Ave.

Site Description Right or North well  
West fitting or well head

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth unknown - check records Orifice or Flow Controller # 19

Canister # 4018

Name of Person Collecting Sample \_\_\_\_\_

Start Date 6/6/2013 Start Time 12:56

Stop Date 6/6/2013 Stop Time 13:43

Sample collected from fitting on top of well head

Notes: (other measurements)

ambient PID 4.81 FID -1.57  
soil/gas PID 6.13 FID -1.15  
start 28 in Hg

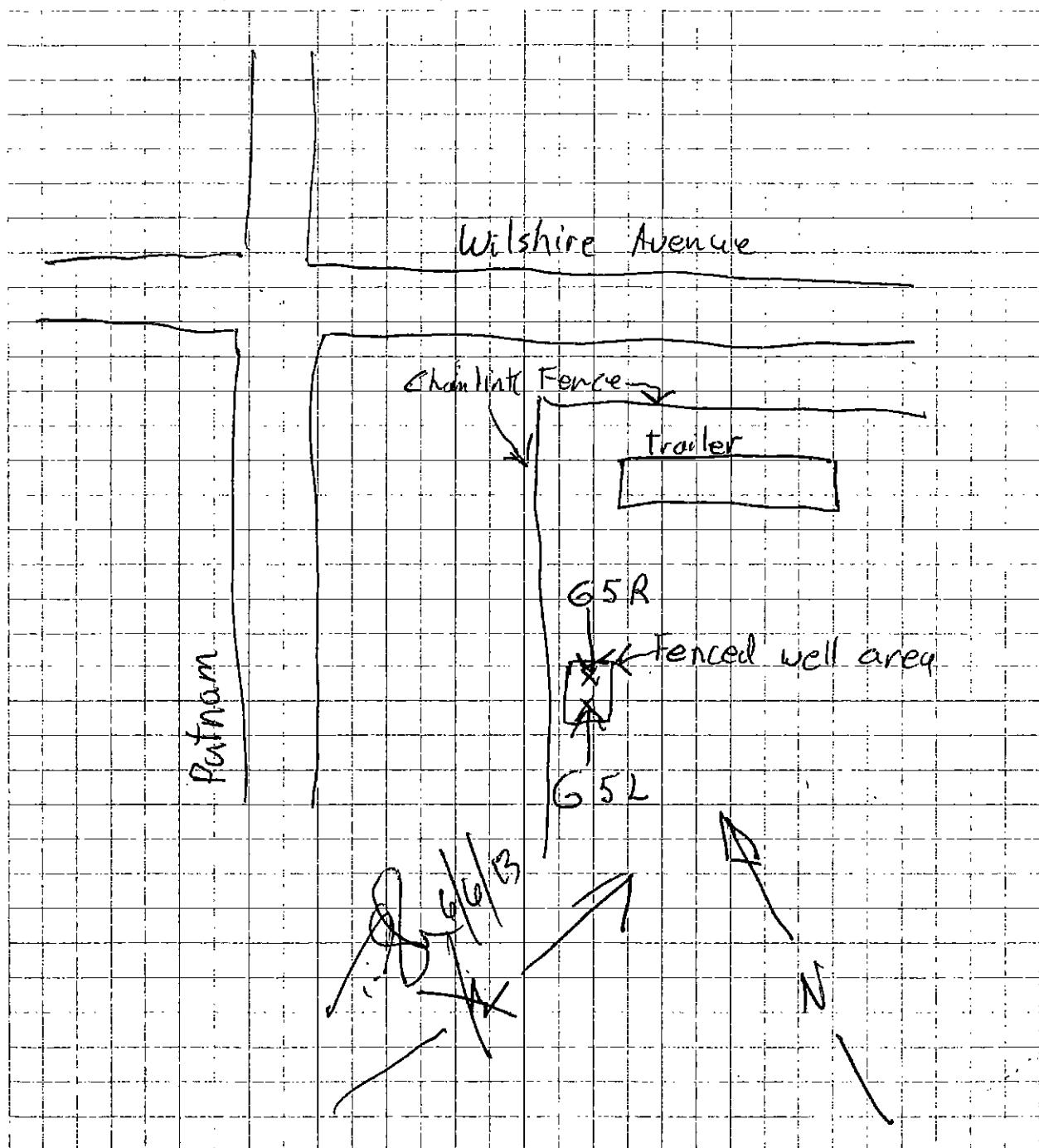
Continued next page

42 0L JI

*Continuation of field record for sample*

*GSR SG 0613*

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

*JL 6/6/13*

US EPA Region 4  
Soil Gas Study  
Lees Lane Landfill Site  
Louisville, Jefferson County, Kentucky  
SESD PROJECT # 13-0364  
June 2013

Station I.D. GSL Sample I.D. GSL.560613  
<Station ID>/<media code>/<Date>

GPS Location N 38, 19382, W 085.87566 ± 16'

Street Address 4402 Wilshire Ave.

Site Description left or South well

North fitting on well head

Type of sample:  Air Sample  Soil Gas Sample

Sampling Depth unknown check records Orifice or Flow Controller # 20

Canister # 4152

Name of Person Collecting Sample T. J. S.

Start Date 6/6/2013 Start Time 13:02

Stop Date 6/6/2013 Stop Time 13:45

Sample collected from fitting on top of well head

Notes: (other measurements)

ambient PID 4.16 FID - 1.82

soil gas PID 1.40 FID - 3.41

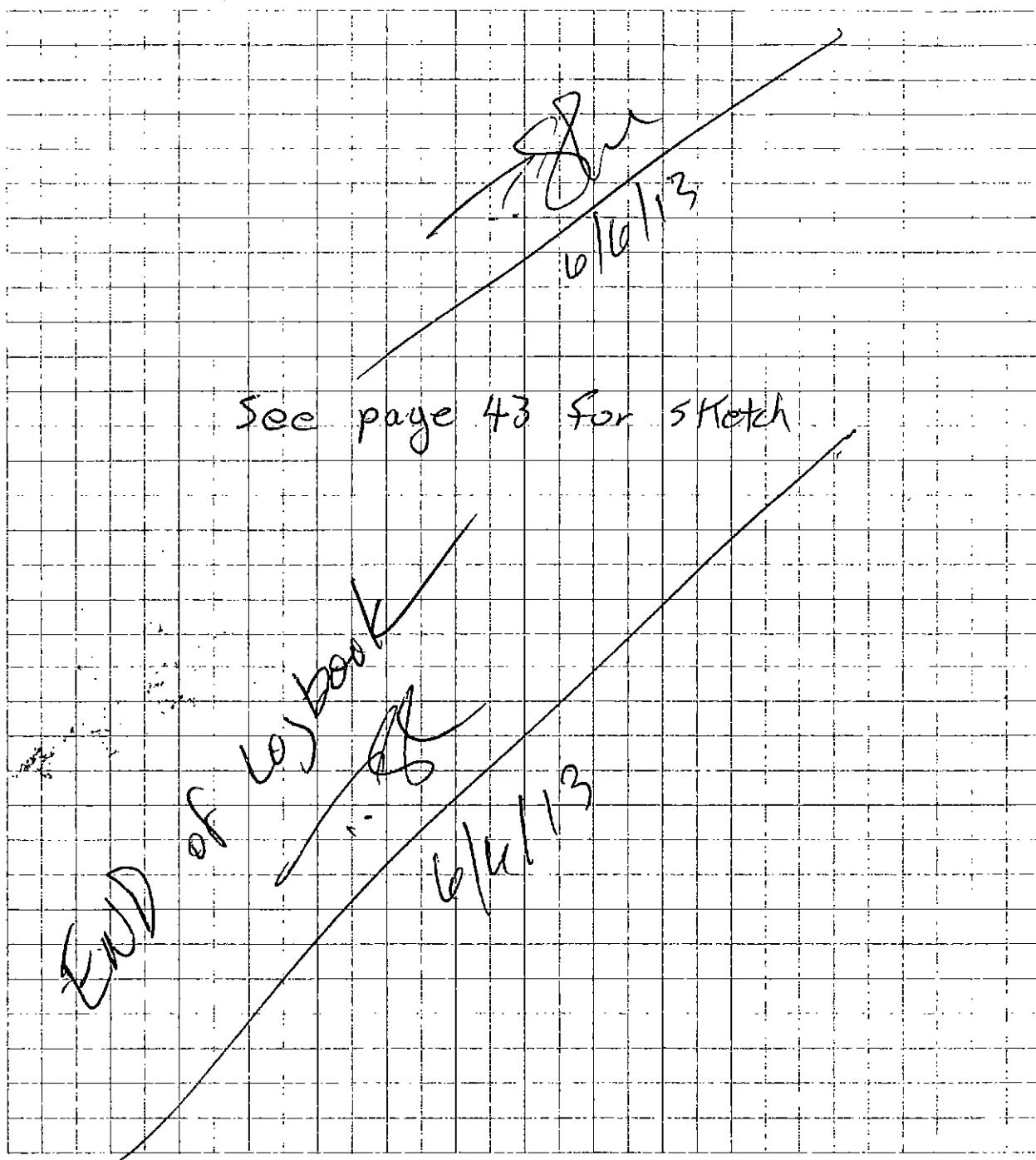
start 29 in Hg

Continued next page

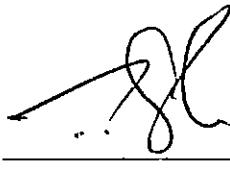
44-01-01

Continuation of field record for sample G5L3G0613

**Other Notes/Sketch (Include North and Scale)**



Sample Team Leader/Sampler Signature/Date

 6/6/13

**APPENDIX F**  
**FIELD DRILLING LOGBOOK**  
**(5 pages)**



# JOB BOOK

FROM BEN MEADOWS COMPANY

PROJECT NAME Locs home Landfill

PROJECT NUMBER \_\_\_\_\_

CREW Brian Striggin / Stephen Camp

DATE \_\_\_\_\_ BOOK # \_\_\_\_\_ OF \_\_\_\_\_

WEATHER \_\_\_\_\_

FIELD BOOK  
16 PAGE  
8 LEAVES  
50% RAG

## CURVE FORMULAS

$$\begin{aligned} T &= R \tan \frac{1}{2} I \\ T &= \frac{50 \tan \frac{1}{2} I}{\sin. \frac{1}{2} D} \\ \sin. \frac{1}{2} D &= \frac{50}{R} \\ \sin. \frac{1}{2} D &= \frac{50 \tan \frac{1}{2} I}{T} \end{aligned}$$

$$\begin{aligned} R &= T \cot. \frac{1}{2} I \\ R &= \frac{50}{\sin. \frac{1}{2} D} \\ E = R \operatorname{ex. sec} \frac{1}{2} I \\ E = T \tan \frac{1}{2} I \end{aligned}$$

$$\begin{aligned} \text{Chord def.} &= \frac{\text{chord}^2}{R} \\ \text{No. chords} &= \frac{I}{D} \\ \text{Tan. def.} &= \frac{1}{2} \text{ chord def.} \end{aligned}$$

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for  $1^\circ$  for 1 ft.) and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

## GENERAL DATA

**RIGHT ANGLE TRIANGLES.** Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt.  $10.10^2 \div 200 = .5$ .  $100 + .5 = 100.5$  hyp.

Given Hyp. 100, Alt.  $25.25^2 \div 200 = 3.125$ .  $100 - 3.125 = 96.875$  = Base.

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

**LEVELING.** The correction for curvature and refraction, in feet and decimals of feet is equal to  $0.574d^2$ , where  $d$  is the distance in miles. The correction for curvature alone is closely,  $\frac{1}{4}d^2$ . The combined correction is negative.

**PROBABLE ERROR.** If  $d_1, d_2, d_3, \dots$  etc. are the discrepancies of various results from the mean, and if  $\sum d^2$  = the sum of the squares of these differences and  $n$  = the number of observations, then the probable error of the mean =  $\pm 0.6745 \sqrt{\frac{\sum d^2}{n(n-1)}}$

## MINUTES IN DECIMALS OF A DEGREE

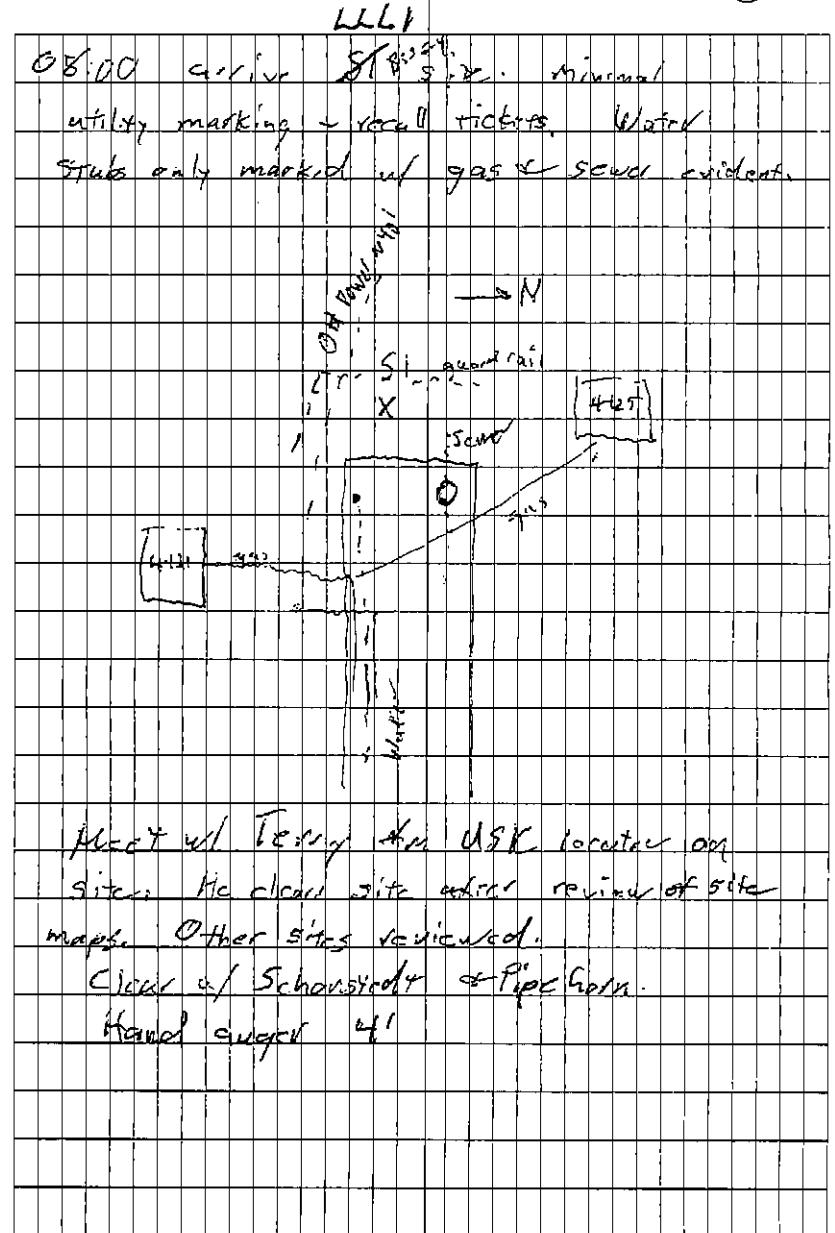
1'	.067	11'	.1833	21'	.3500	31'	.5167	41'	.6833	51'	.8500
2'	.0333	12'	.2000	22'	.3667	32'	.5333	42'	.7000	52'	.8667
3'	.0500	13'	.2167	23'	.3833	33'	.5500	43'	.7167	53'	.8833
4'	.0667	14'	.2333	24'	.4000	34'	.5667	44'	.7333	54'	.9000
5'	.0833	15'	.2500	25'	.4167	35'	.5833	45'	.7500	55'	.9167
6'	.1000	16'	.2667	26'	.4333	36'	.6000	46'	.7667	56'	.9333
7'	.1167	17'	.2833	27'	.4500	37'	.6167	47'	.7833	57'	.9500
8'	.1333	18'	.3000	28'	.4667	38'	.6333	48'	.8000	58'	.9667
9'	.1500	19'	.3167	29'	.4833	39'	.6500	49'	.8167	59'	.9833
10'	.1667	20'	.3333	30'	.5000	40'	.6667	50'	.8333	60'	1.0000

## INCHES IN DECIMALS OF A FOOT

1-16	3-32	1/16	3-16	5/16	5-16	3/16	5/16	9/16	11/16	13/16	15/16
.0052	.0078	.0104	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729	
1	2	3	4	5	6	7	8	9	10	11	

6-4-13

(1)

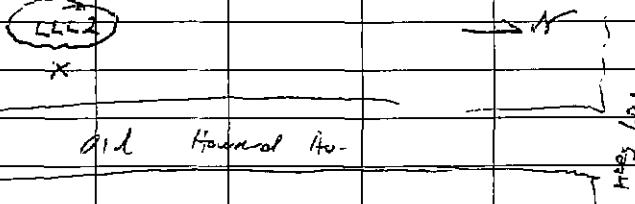


14:30 LLL1 6-4-13 (2)  
 0-24' EGSy probing with hammer use.

Place PRP w/ open interval  
 for 6'-24' BGS. Place 3" crudies  
 in bottom of hand auger hole & hydrate.

14:45 (2) LLL2 at 0-10'. S. at less than  
 on Howard Ave. noted S. somewhat to  
 find upgradable site

No apparent utilities. Nearing USL margin.



Cleared Schonstedt pipe from 4'  
 hand auger.

Probe to 25' - easy probing minimal  
 hammer. Deploy pit w/ 6-24' EGS  
 interval.

6-4-15 (3)

14:30 @ LLL3 (3) G614 Putnam + Debbie  
 Find all hammer. Hammer Dould circled  
 w/ hammer at hammer on site

approx LLL3

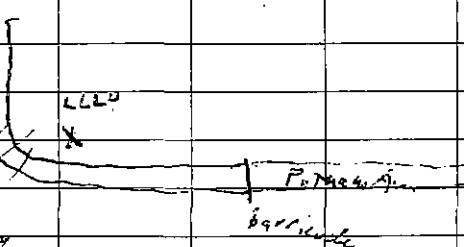
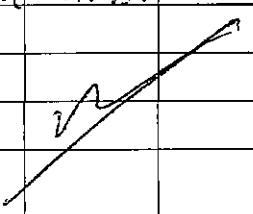
P-1 (1)

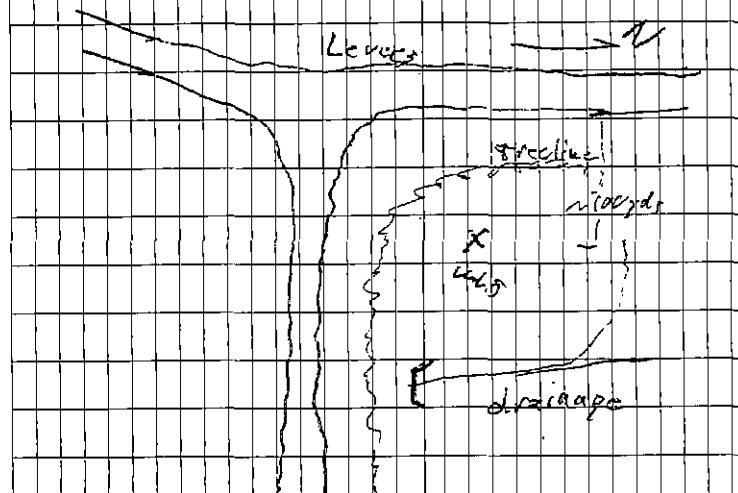
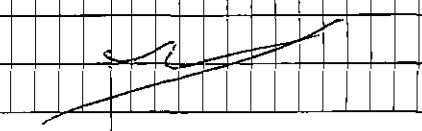


Putnam S+

3' to over use. Cleared w/ Schonstedt  
 pipe from 4' hand auger.

Establish PRT @ 6-24' interval  
 BGS. Easy probing.

(4)	6-4-13	(4)
15.45	@ site LL65 South end Putman Ave N 150 yds past guard rail.	
	→ N	
		
	Clear site w/ Schonstedt, Pipetor, or hand auger 4'. Discussed w/ USIC. If waterline present, it is on E. side of street	
	Establish PRT sampler w/ 6-24' open interval BG5. Easy probing. All locations today checked w/ well sounder @ 24' - all clear of water. All sealed w/ 3 qts ironite concrete @ bottom of head cage and hydrated in life.	
		

(5)	6-5-13	(5)
	~05:30 @ LL65. Southernmost point @ corner 17 levees	
		
	Clear w/ Pipetor, Schonstedt & hand auger 4'. Establish PRT w/ 6'-24' open interval. Easy to moderate difficulty probing.	
		

6-5-13

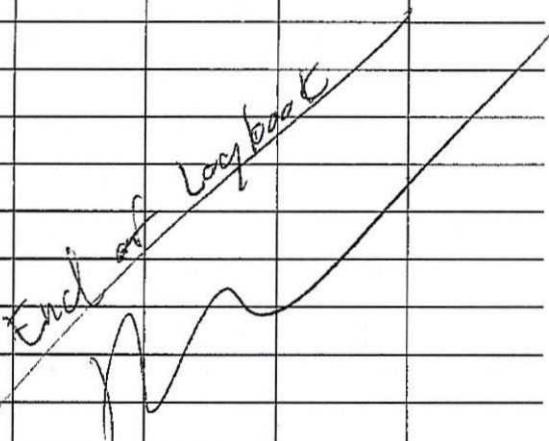
⑥

~11:30 LLL5 grouted by pulling  
PRT or recently pressure grouting  
W/I 6.25 rods. Pump 30% solids  
Bentonite grout to above 4'. Finish  
top of hole w/ bentonite crumbles  
hydrated in lifts.

~14:00 LLL4, LLL3, LLL2, & LLL1  
decommissioned similar to LLL5

16:30 Clean up tools.

~17:00 off site



End of Report